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The Lincoln Guidance Research Project, funded by the National Defense Education Act, studied a group of junior high school students in a transitional neighborhood with major emphasis on educational needs of students who will find employment in service occupations. Recommendations included intensive remedial work at the seventh grade level, continual evaluation of students' progress throughout the junior high grades, increased guidance and counseling staff, and a third curriculum choice at the tenth grade level, in addition to college preparation and vocational education. It was proposed that students with less than high school capabilities enter a two-year intensive work-experience training program in preparation for vocational opportunities which do not require high school graduation for employment. Test results, questionnaires, and rating forms used in the study are included as appendices. (JH)

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David Segel

Ronald A. Ruble

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Albuquerque Public Schools • 1962

THE LINCOLN PROJECT

A STUDY OF THE EDUCATIONAL PROGRAM OF A JUNIOR HIGH SCHOOL IN A TRANSITIONAL NEIGHBORHOOD

A Report of the Lincoln Guidance Research Project

By

David Segel

and

Ronald A. Ruble

A Project of the Albuquerque Public Schools
Guidance Services Department
Stanley W. Caplan, Coordinator

Albuquerque Public Schools
Public Information and Publications Department
Albuquerque, New Mexico
1962

ALBUQUERQUE PUBLIC SCHOOLS

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Board of Education

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Robert M. Elder ..... Vice-President

Jeannette Stromberg ..... Clerk

J. Leon Thompson ..... Chairman, Board of Finance

Floyd F. Darrow ..... Secretary, Board of Finance

Preface

The Lincoln Guidance Project was originally conceived by Dr. Charles R. Spain, aided by Dr. Stanley W. Caplan and Dr. William L. Jamison. It was supported by funds provided by the federal government under the provisions of the National Defense Education Act. The general concern of the Albuquerque Public Schools regarding the problem has been outlined by Dr. Spain in his foreword.

It was recognized by the schools that the problem occurring in low socio-economic level neighborhoods was a complex social problem and not necessarily one which the schools could expect to solve by themselves. Nevertheless, the Albuquerque Public Schools were determined to help ameliorate the situation, if possible. The question asked the research team was: In what way can the school, as a social institution, aid in solving this problem? The junior high school was chosen for the study since the symptoms of maladjustment in both personal and social adjustment, variations in achievement, and changes in aspirational level seemed to become acute during the junior high school years. The research team was fortunate to find a junior high school wherein the principal, Robert Evans, was grappling with the problems of youth in a low socio-economic level neighborhood. Mr. Evans' interest in the problem has been of considerable assistance to the research.

On November 1, 1959, David Segel, formerly of the U.S. Office of Education, was appointed director of the project, and Ronald A. Ruble, a consultant in the Guidance Services Department, was appointed as a special assistant to help develop and carry out the project.

The research team developed a design of the study which was approved by Dr. Spain, Dr. Caplan, and Mr. Evans. The initial observational field work in other, similar cities was carried out in January, 1960. The measurement work, rating of behavior, home visitation, rating of parental attitudes, etc., was carried out during the period January to May, 1960. Most of the 1960-1961 school year was devoted to analysis of the data, and the final school year, 1961-1962, was devoted to drawing conclusions and writing reports.

During the period from January, 1960, to May, 1961, various progress reports were made which were discussed with the Guidance Services Department and the administrative staffs. In addition to the main report herein presented, two articles have been prepared for publication.

A committee, appointed to read and study means of implementing the report, was appointed by the Superintendent. The committee was made up as follows:

Dr. Noah C. Turpen, Assistant to the Superintendent
Dr. Robert J. Myers, Coordinator of Research
Nelson W. Lowery, Coordinator of Vocational Education
Marian Barefoot, Director of Special Education
Maynard Bowen, Director of Personnel
Fred R. Nelson, Coordinator of Elementary Education
Robert A. Evans, Principal, Lincoln Junior High School
William F. Wright, Principal, Albuquerque High School
Ernest S. Stapleton, Principal, Valley High School
Ralph E. Dixon, Principal, Washington Junior High School
Aristides B. Chavez, Principal, Rio Grande High School
Dr. Thomas T. Sasaki, Professor of Sociology, University of New Mexico

This report is submitted by the Guidance Services Department for the consideration of the Superintendent of Schools and the Board of Education.

Dr. David Segel, Director
The Lincoln Project

Ronald A. Ruble, Assistant Director
The Lincoln Project

Dr. Stanley W. Caplan, Coordinator
Guidance Services Department

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Introduction

The problem of the best or even a good educational program for a particular group of pupils in a specific grade, school, or school system is a recurring one in American education. One reason for this is that present interpretations of democracy appear to recognize the principles that children and youth have the right to educational opportunities to fit their abilities and realizable aspirations. Another reason is that, due to industrial/technological efficiency and needs, industry can use more highly trained personnel than ever before. The industrialized aspect of our society continually demands more education for youth.

Because of this demand there has been, especially since Sputnik, an upsurge in pressure towards two goals. One of these is towards keeping youth in school longer, and the other is to emphasize more basic science and mathematical training—especially for the academically talented. At the college level, an increasing number of students with such potentials are being provided financial encouragement. However, such financial aids have not been forthcoming at the secondary level of education. In spite of this disadvantage, youth have been increasing their stay in school from one decade to another. Part of their increased stay in school has been the result of stricter enforcement of the compulsory school attendance laws. Secondly, those students who could be and formerly were excused from school early (i. e. below the normal age for leaving school) to go to work cannot now actually find such work.

All of this creates an unusual situation—that is schools encouraging youth to go to school for a longer period of time—to which they are responding, but the students find that the type of education offered by the schools, **while adapted to and of great stimulation to a substantial majority of pupils is not adapted to nor stimulating to a surprisingly large number of pupils.**

This situation briefly described has led in large cities, where there are minority underprivileged groups, to what has been called by Conant, "an explosively bad situation."*

There is, however, a bright side. In analyzing the occupational picture further, it may be found that, due to the advance in the standard of living over the years, caused by the enormous productivity of industry per man, people have more time for leisure and more time to enjoy what life can offer. People can enjoy these comforts more easily because of changes in purchasing habits and increased potential security provided by many differing kinds of insurance.

This new security, greater leisure time, and increased productivity appear to have created an increase in the number of people required to serve the physical, social and recreational needs of society. Radio and television require considerable personnel for continued operation. Automobiles and airplanes are increasingly used for travel and thus considerable personnel are needed to maintain these instruments of travel. In addition, others are needed to maintain increased numbers of hotels, restaurants, motels, gas stations, and a thousand other service occupations. The number of people living to and beyond the age of retirement increases the special needs for various services for the care of these senior citizens. Last, but not least, the buying powers engendered by tremendous economic expansion and the consequent surge towards better living produce, therefore, new jobs for salesmen and saleswomen in the millions.

There is a steadily growing need in this country for the services briefly indicated. These service personnel do not need the technical education of college or the vocational education at the high school level. They do need to know, however, how to get along with people and with machines; how to take care of the needs of everyday living, to know what actions are safe and which are dangerous, to understand the economics of daily living, and the meaning of a democratic way of life.

*James B. Conant. *Slums and Suburbs*. New York: McGraw Hill Book Company, 1961. p. 146.

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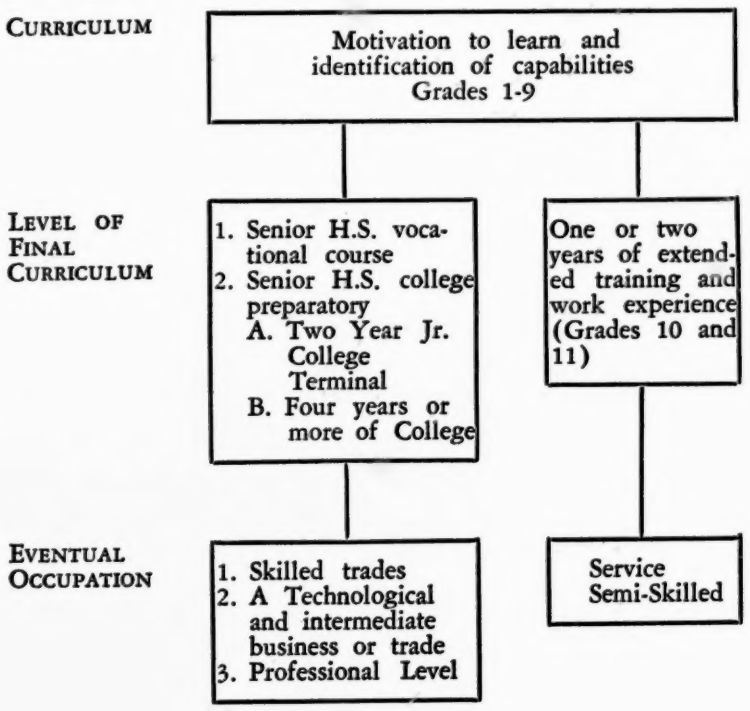
The question for education, accepting the analysis of the present study, seems, therefore, to have two aspects—although both begin with common problems in grades one through nine.

This question may be summarized by the following paradigm:


CURRICULUM
Motivation to learn and identification of capabilities Grades 1-9
LEVEL OF FINAL CURRICULUM
1. Senior H.S. vocational course
2. Senior H.S. college preparatory
A. Two Year Jr. College Terminal
B. Four years or more of College
One or two years of extended training and work experience (Grades 10 and 11)
EVENTUAL OCCUPATION
1. Skilled trades
2. A Technological and intermediate business or trade
3. Professional Level
Service Semi-Skilled

This report summarizes three years of study of both aspects of education shown in the above paradigm. The Lincoln Guidance Research Project studied one group of students in a transitional neighborhood, and the emphasis of the research was upon the needs of the students who are likely to find employment in the great area of service occupations.

The conclusions arrived at, as a result of the research, deserve the active consideration of all those in education and guidance who work with similar children. The school is part of the school system of the community, and, therefore, it is of interest to all. Support for implementation is needed. First of all, through professional knowledge and willingness to strike out into a new territory, plans proposed may be investigated. Secondly, there is a need for supplementary funds for advancement through the type of program delineated, and, thirdly, there must be active support within the professional staffs of the Albuquerque Public Schools. Finally, the public must be informed and educated in order that such plans can be translated into effective community action.

Charles R. Spain
Superintendent
Albuquerque Public Schools

CHAPTER I

General Methodological Considerations

This research project has certain overall features which cannot be described within the normal outline of most research projects. Most projects would list a hypothesis to be tested; a statement of the bearing of previous research in the same area; an experimental and/or statistical design, including a description of the treatment; a description of the instruments utilized; the analysis of the findings; and a statement of the conclusions drawn.

The present study used all of the aspects of the typical research study, but departed from such a rigid outline for several reasons. For example, a number of hypotheses were tested simultaneously. Further, the hypotheses were developed into more detail as the research itself was developed. In addition, the research study itself was of the multi-design type.

The relationship of the various types of attack used can be seen in the diagram titled "Anatomy of the Lincoln Guidance Research Project," which was developed early as a general guide for the entire study. In addition, materials and methods represented in the guide were specified as completely as possible ahead of time. Since this was not an experimental study, the research team was free to pursue any leads which seemed profitable and to discard those which seemed fruitless upon preliminary investigation.

It may be noted that the research involved the relationship among the principal sources of evidence—**i.e.** the field, documentary, and analyses of the data. The principles developed from synthesis of the findings from an analysis of the different documentary studies were checked against the principles which seemed to be successful in the school systems which were visited. In addition, the synthesis included other published reports concerning other school systems and the actual principles developed through the present research at Lincoln Junior High School.

The main group of students in the investigation were the ninth graders, since the pupils at that level have at least partially developed the traits in which the school and the research team were most interested. Further, by this age, the traits which were measured could reasonably be expected to be sufficiently developed to allow more accurate measurement. The research team tested both the seventh and the eighth grades at the same time to see if there were any substantial differences among the grades —in order that the selection of a sample from a single grade might not be too biased. The seventh, eighth, and ninth grades fell within one mean IQ point of each other. General observation of the frequency of delinquency rates and the cultural composition of the community revealed no differences of consequence. The seventh and eighth grades probably differ in age, drop-out rates, achievement grade placement, etc. However, **the ninth grade was selected as the sample population.** A sampling of this ninth grade population was used in the correlational phases of this study. The sampling will be described in more detail shortly.

Anatomy of the Lincoln Guidance Research Project

Areas of Adaption of the School Program (Areas in Which the Hypotheses Were Made)

A. Curriculum
   1. Adaption in Basic Subjects
   2. Diversity of Subjects Including Possibilities for Work Training

B. Guidance
   1. Counseling and Guidance Methods
   2. Appraisal Methods

C. Delinquency as a Separate Problem

Materials Used for Solution or Recommendations

A. Field Observation
B. Documentary
C. Data
   1. Retention:
      a. Overall retention rates in Albuquerque by age
      b. Follow-up of Lincoln Graduates for a three year period
   2. Home Factors
   3. Achievement
      a. Tests
      b. Marks
   4. Intelligence
   5. Aptitudes
   6. Personality
      a. From Group Tests
      b. Ratings by Teachers
      c. Delinquency Rates

Methods

A. Analysis of Documentary Evidence and Field Observation

B. Analysis of Data Through
   1. Means
   2. Variance
   3. Correlational Analysis, including Chi-Square, Biserial, and others correlational methods adapted to the data.
   4. Tests of Significance Between Groups

Hypotheses

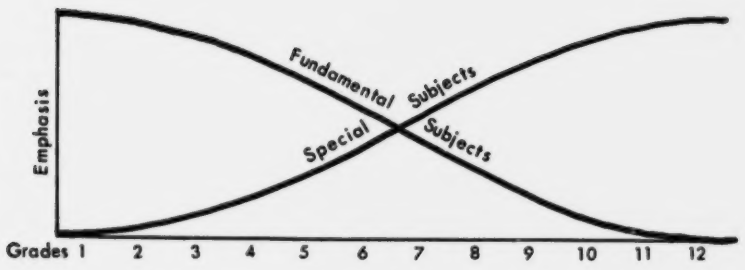
The general hypotheses noted below were later expanded into nine detailed ones as the thinking and documentary orientation in the initial planning stages progressed. Those which were developed to the highest degree to help guide the investigation were:

1. The assessment of aptitudes should be made a specific function of the school. The counselor is trained and should be responsible for the assessment of the aptitudes. Counselors should not be primarily concerned with the actual instruction in the classroom. Counseling, in the basic sense, has to do with psychological and sociological approaches which are educational only in a broader context. The counselor is a consultant to the principal in this specialized field. It would seem that although committees of teachers and administrators should be consulted in working out an achievement testing program, other areas of testing might be better planned wholly by the coordinator of the Guidance Services Department and his staff working in a consultant capacity with counselors and interested teachers.

2. There should be a broader and more diversified curriculum in schools similar to the one studied. The needs of the pupils in this school would seem to make this imperative. For example, most pupils might make good use of courses in industrial arts and homemaking. In terms of student potential, some students would very possibly need further, more intensive work in fundamental subjects. Others might be challenged by more difficult work in more interesting subject areas. It appears that more electives are needed to take care of pupil differences.

   At the end of the seventh grade, or not later than the beginning of the eighth grade, the student's whole program should be examined by the counselor, and a conference with student and perhaps the parents might be arranged.

3. Terminal education should be provided for certain groups of students. A change to this point of view could be gradual or sharp. It is related to the potential of the student and his school-leaving proneness. If this hypothesis is correct, it would be extremely important at Lincoln Junior High School. A diagrammatic representation of the hypothesis follows:



It would appear valuable to investigate the possibility of the establishment of a committee of business leaders from the community, union leaders, guidance and curriculum people to implement the training for work in this community, especially if work experience is developed as a basic part of the plan.

4. The curriculum should be adjusted to aid students frustrated by seemingly insurmountable environmental obstacles. One type of frustration is that which is generated within the individual primarily from his own feelings of inadequacy. This individual is in conflict with himself. This is the most common form of frustration, and it is one which psychologists have rightly contended is most serious.

The other type of frustration occurs usually as a result of conflict with environment. This type is thought to be the most common in the lower socio-economic classes. Methods of diagnosis of this type of frustration and means of treatment have not been developed to the present. The diagram of characteristics (page 4) is an attempt to simplify this dichotomous classification.

The concern with adjusting the school environment for these frustrated students would follow. This cannot be done, however, without a curriculum which allows for unusual flexible programming.

The problem is two-fold. First a reliable method for the identification should also allow the counselor to distinguish between both types of frustration. The cues in the hypothesis can serve as a basis for the beginning of this study. Secondly, a method for the treatment of the norm-violating, frustrated pupils should be evolved. All of the hypotheses have a bearing on this problem. An exploratory study of this area was to be implemented during 1960-1961.

There should be gradual, but definite, introduction of democratic orientation in administration and instruction. This is in sharp contrast to the present national theory of school administration and instruction. The reason for this hypothesis lies in our hypothesis that children from this community need firm direction. Assuming the validity of this hypothesis, it seems likely that the students will respond to an authoritative approach. **To introduce them to a warm, democratic classroom without adequate preparation would create chaos.** Democracy at Lincoln Junior High School must be introduced gradually during the entire three years that the student is in school. It may be introduced through guidance and school offerings, and perhaps mainly by the example which the teachers, counselors, and administrators furnish. The first step to aid all of the students to make progress in this direction is effected by adapting the school program to the individual. As a part of this adaption, clubs and extra-curricular activities should become more important and the introduction of democratic procedures can then be made through these channels.

In general, the research study was able to determine and substantiate the validity of the hypotheses with one exception—hypothesis number four. After going over the evidence, including the Lincoln and the documentary data, it was concluded that these data reinforced the original analysis, but it did not go far enough to solve the problem. This problem now forms the focus of a further research effort which is in the process of development. The essential nature of this problem is discussed in more detail in Chapter IV, **Recommendations for Further Research.**

Materials and Data Collected

Field Observation

Junior high schools were visited in Los Angeles, Phoenix, Tucson, San Diego, Corpus Christi, San Antonio, and Memphis to observe attempts to adjust the school program in underprivileged neighborhoods. In some schools a greater variety of elective subjects were being offered in order to make the school more attractive—in others there was an emphasis on reading, arithmetic, and language with considerable nonpromotion in order to teach these students the fundamental subjects. In other junior high schools, which were located in newer buildings, there was a conscious effort to get the pupils to take pride in the school plant. Some junior high schools were emphasizing industrial arts for boys and home economics for girls. Some schools were especially interested in the sciences. Some schools followed state regulations regarding curriculum more closely than others. However, different schools in the same state—and even within the same city—were interpreting the same regulations differently. Perhaps it would be more accurate to state that their interpretations of the role of the junior high school in a given community were more liberal or rigid than state regulations. In none of the schools, however, had the administration made a substantial effort to evaluate the result

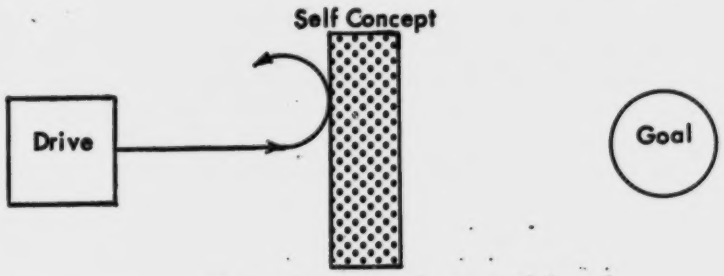
TYPE I
Conflict within the individual or non-social behavior

SYMPTOMS
Described as neurotic or prepsychotic. Usually withdrawn. Usually not of the criminal type. Often truant.

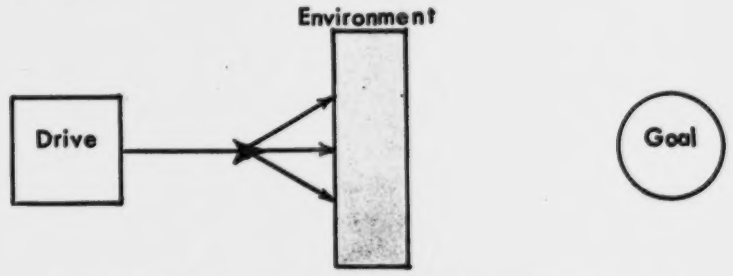
TYPE II
Conflict with the environment or norm-violating behavior

SYMPTOMS
Described as aggressive toward teachers, school, other pupils, property, etc. "Acting out" type. Criminally inclined.

FORMATION OF FRUSTRATION

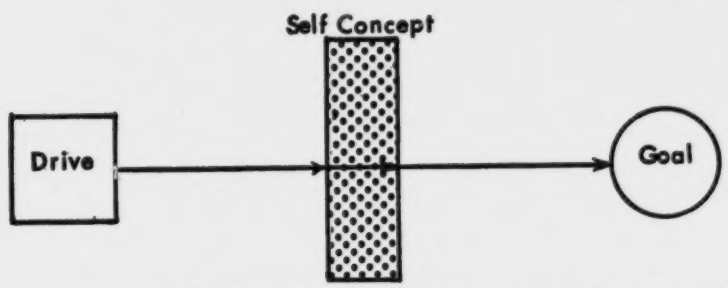


If not helped leads to withdrawal

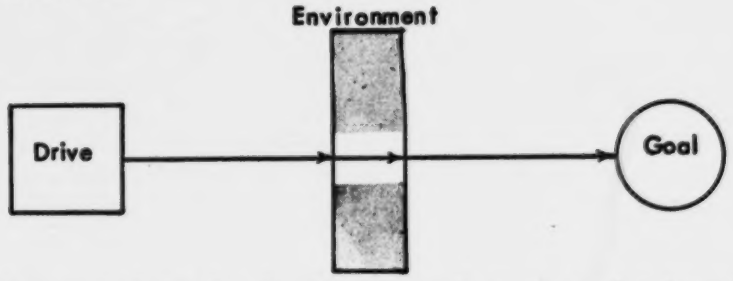


If not helped leads to aggression toward environment

SOLUTION OF FRUSTRATION



Overcoming frustration. By understanding himself he can attain goal thereby adjusting to his environment.
75 per cent of the serious behavior cases in the middle and upper socio-economic classes are of this type.* Teachers often do not recognize this type.



Overcomes frustration by changing environment so that he can attain his goal or a substantial goal. *Environment is adjusted to student.*
75 per cent of the serious behavior cases in the lower socio-economic classes of society are of this type.*
Teachers recognize this type fairly easily.

*From William C. Kvaraceus and Walter B. Miller. *Delinquent Behavior: Culture and the Individual.* (Washington, D.C.: National Education Association, 1959) p. 55.

of any particular approach, although in every case, the approaches were verbally justified on the basis of varying principles of child development and previous experience.

It was the considered opinion of the research team that although the problem was most apparent in a number of the schools visited, most attempts at solution were tentative and mainly based on a trial and error approach. It was felt that the very presence of a variety of possible answers and practices indicated that the problem requires the application of an overall scientific approach insofar as the state of research methodology in social and psychological sciences would allow.

Documentary Investigation

The literature was searched for findings which seemed to have possible bearing upon the present research. The data from many research projects in education were analyzed and synthesized. The combination of these materials, together with the findings developed from the data gathered on the students, parents, and the community of Lincoln Junior High School might be termed an analytical evaluation.

The bibliography of references found at the end of the chapters on **Educational and Vocational Guidance** and **A Curriculum for a Junior High School in an Impoverished Urban Area** were the major resources used but many other sources provided considerable assistance in developing principles from documentary sources.

The Data

Retention

1. Overall Retention Rates in Albuquerque. Using enrollment of all public and private schools in Bernalillo County by grade average and by combining this information with the data from the 1960 census relative to youth from five years of age to twenty years residing in the county, a distribution was made. In this manner, the number of out-of-school youth at any particular level was immediately available. In addition, it was possible to determine the student population of this area by both age and grade.

2. Follow-up of Lincoln Junior High School Graduates for a Three Year Period. This study indicated the future of the pupils from Lincoln Junior High School in terms of further schooling. To do this, a random sample from three previous graduating classes was made. The classes of 1956, 1958, and 1959 were selected. These students would be, normally, in the tenth and eleventh grades, and the 1956 graduates would have graduated from high school in 1959. Alphabetical lists of the students in each of these graduating classes were prepared and numbered. One third of each class was selected by applying a table of random numbers. In this manner, the following numbers of students were selected from each class:

Class of 1959	61
Class of 1958	96
Class of 1956	73

Home Factors

The home factors thought to have promise were those related to the attitudes of the parents toward the school and towards discipline within the home. To discover these factors, the research team found that the scales used by Bandura and Walters* were the most appropriate. Eleven of these scales were used. The scales were identified thus:

Scale 2: Level of school achievement desired of child by parent.

Scale 3: Pressure placed upon the child for achievement in school.

Scale 4: This scale was simply an average of ratings on scales 2 and 3, and was not found to add anything to the knowledge obtained from these scales alone. It was omitted from consideration.

Scale 5: Restrictions placed on the student outside of the home.

Scale 6: Restrictions placed on the student within the home.

Scale 7: Parental demands for obedience.

Scale 8: Parental consistency of demands.

Scale 9: Parental permissiveness for aggression against siblings.

Scale 10: Parental punitiveness for aggression against siblings.

Scale 11: Parental permissiveness for aggression against other adults.

Scale 12: Parental punitiveness for aggression against other adults.

A Spanish translation of the questionnaire was made, and this was used when it seemed that the respondents would be more familiar and comfortable with the conversation in Spanish. In order that the families might not be unduly alarmed by the interviewer's visit, a preliminary letter, signed by the Superintendent of Schools and the Principal of Lincoln Junior High School, was written and sent out to each of the families to be interviewed. The letter was written in English, only, and it was written as simply as possible. The letter described the project briefly, indicated that an interviewer would call on the family on a specific date (in the morning or afternoon); assured the family that the information gathered in the interviews would be entirely confidential; and gave the parent the opportunity to change the time of the interview, should the time set be inconvient.*

Previous to the actual visitation, a meeting of the interviewers was called. Assignment of specific families to interview was made, considering the time each interviewer could donate to accomplish the task. The questionnaire and the check sheet were carefully discussed, and an attempt was made to establish consistency of scoring. One interview was role played, with the interviewers taking part, and all attempting to score the various answers as they were given.

During the actual interviews, a number of questions concerning the most acceptable method of marking the check sheets occurred. Each time this happened, an attempt was made to establish a standard method of scoring, and the method was communicated to all interviewers.

The families interviewed were a sample of about half of the ninth grade. This sample was used for the statistical phases which are described under the methods of analysis.

Achievement

The Iowa Tests of Educational Development (ITED) were used to test student achievement. This consists of nine sub-tests, only the first eight of which were used in the study: (1) Social Studies Background, (2) Natural Sciences Background, (3) Correctness of Expression, (4) Quantitative Thinking, (5) Reading—Social Studies, (6) Reading—Natural Science, (7) Reading—Literature, (8) General Vocabulary, and (9) Use of Sources.

Intelligence

The Lorge-Thorndike Intelligence Test was used. The sub-tests allow both a Verbal and a Non-Verbal IQ to be measured.

Aptitudes

The Multiple Aptitude Test was used. Scores from this test are expressed in four factors: (1) Verbal Comprehension, (2) Perceptual Speed, (3) Numerical Reasoning, and (4) Spatial Visualization.

Personality

1: Group Tests of Personality. The California Personality Inventory (CPI) was scored on the following dimensions: (1) Dominance, (2) Capacity for Status, (3) Sociability, (4) Responsibility, (5) Achievement via Conformance, and (6) Achievement via Independence.

2: Behavior Ratings by Teachers. All teachers and counselors at Lincoln Junior High School were requested to rate the behavior of a selected number of their pupils in terms of several criteria listed on the behavior rating

*Albert Bandura and Richard H. Walters. *Adolescent Aggression.* (New York: The Ronald Press Company, 1959).

*The Superintendent's letter, the questionnaire, and the check sheet may be found in the Appendix.

sheets.* The use of these forms was explained to the professional staff of the school at a meeting held in the morning, and the staff members were requested to complete the forms and return them no later than 3:30 p.m. the same day. It was further requested that they not discuss their ratings with any other member of the staff, for it was explained that this might have some influence on the rating which they were to make. The counselors were requested to identify a larger number of pupils than the teachers were, for they would have had contact with more children on a basis which would make selection easier.

As the form indicates, the professional staff was requested to rate their students in terms of **both aggressive and withdrawn behavior.** It was felt that the teachers and the counselors would be able to recognize children whose behavior conformed to the indicated symptoms rather than children whose behavior deviated from normal in other ways.

This procedure resulted in the establishment of two groups of students: (1) those noted as having behavioral difficulties, and (2) those students who were not identified by any professional staff member. Only the behavioral ratings of the ninth grade students were used for the study, but it was necessary to have the teachers rate all children in all grades, for it was administratively more convenient. Many teachers taught mixed classes, and the task of explaining that the team wanted only ratings on ninth grade students could have added undue bias to the results.

An approximate measure of court-recorded delinquency rates for the school and for the ninth grade indicated that there would not be enough cases in our sample to yield valid relationship with other factors. The behavioral ratings by teachers, it is felt, serve as a rough measure of predelinquency.

Sampling of the Ninth Grade Students and Analysis of the Data

Because of the large number of variables in the study, it seemed necessary to reduce the number of cases for the statistical work, since some of this would have to be done by hand. This reduction was made by (a) arranging all the students in the ninth grade in a frequency distribution based on their measured IQ, and (b) selecting, by a random method, a group having the same mean and standard deviation as the original distribution. By this manner, a basic population of 106 cases was selected. However, it was discovered that among these, there were eleven cases wherein complete information was lacking. These cases were eliminated, reducing the sample group to ninety-five.

The data, in the Appendix, pages 35-37, present the basic results, eliminating some cases in order to simplify results and purposes. It should be noted that the cases eliminated had little effect upon the results reported. Whenever such abbreviation is made, it is distinctly indicated. The method of analysis which seemed most appropriate was a study of the mean scores of the various factors and an analysis of the relationships between them. The relationships were obtained through the product-moment or Pearson formula when the scores or ratings on the two factors had five or more steps.* No correction for broad categories was made. When one of the variables was composed of only two categories, biserial correlation was used, for this computation assumes a normal bivariate distribution. In this case, this methodology seemed a reasonable assumption. In addition, it was also necessary to carry on some analysis through partial correlations.

The standard errors for all the correlations coefficients were calculated, and those coefficients found to be at the 1 per cent and 5 per cent level of confidence have been so indicated in the tables.

The standard error for the Pearson r coefficient is:

$$\sigma_r = \frac{1 - r^2}{\sqrt{N - 1}}$$

and that of biserial r:

$$\sigma_{r_{bis}} = \frac{\sqrt{\frac{pq}{y}} - r_{bis}^2}{\sqrt{N}}$$

*See Appendix

*The multiple regression coefficients for data were calculated through the courtesy of the Data Processing Department of Sandia Corporation, Albuquerque, New Mexico.

CHAPTER II

Educational and Vocational Guidance

Introduction

It is held that guidance and curriculum are interrelated areas of the school program. In this section, the recommendations concerning educational and vocational guidance will be presented. An amplification of the recommendations, a rationale for the recommendations, and supporting data and documentary evidence will then be presented in sequence.

The Recommendations

1. It is recommended that the seventh grade at Lincoln Junior High School be established as a major attack area upon all basic skills with intensive remediation being offered to all students at this level who would benefit from this coverage.

2. It is recommended that the students in the second and third years of attendance at Lincoln Junior High School be grouped in classes on a heterogeneous basis. Although student assignments would be highly individualized, it is held that homogeneous grouping at this point would be of little value in light of the research team's recommendation of a problem-oriented approach to education.

3. It is recommended that each student in the second and third years at Lincoln Junior High School be re-evaluated continually by his teachers in light of his progress in the school. Toward the end of the student's third year of attendance, it is recommended that the counselor and the student's teachers work cooperatively to determine student placement in the tenth year of school. It is suggested that the following curricula might provide guideposts for this consideration.

CURRICULUM A. The pupil who is academically able will be sent on to the high school with credits in the fields necessary to allow him or her to enter the regular academic courses in high school which would lead to graduation and possible college entrance.

CURRICULUM B. The pupil whose achievement and aptitude are lower than a specified minimum would then be granted sufficient credits to allow him or her to go to a vocational training program at the high school level. This course would allow high school graduation and eventual entrance into skilled vocational areas.

CURRICULUM C. The pupil whose ability and achievement demonstrate less than high school capabilities will not be encouraged to go on through high school. Rather, it is recommended that he be encouraged to enter a two year course in a separate unit, connected administratively with Lincoln Junior High School. During this final two year segment of his education, the student will work in an intensive work-experience training program. In order that the students in this program might avoid the stigma normally attached to such a program, we would suggest that upon completion of the courses offered during the program, the student be issued a certificate of completion from the Lincoln Community School (the name is suggested). This would allow the student to enter a vocation in one of about thirty per cent of the occupations in Albuquerque which do not require high school graduation for employment.

4. It is recommended that two additional counselors be employed at Lincoln Junior High School. This would bring the counseling staff up to a total of three full-time persons.

5. It is recommended that at least one and one-half clerk-typists be added to the guidance staff at Lincoln Junior High School at the time of the inception of the proposed program.

6. It is recommended that tests of aptitude and ability be administered at the seventh, eighth, and ninth grade levels. This recommendation wiill be amplified in the next section.

7. It is recommended that the counselors and the teaching staff work cooperatively in a careful evaluation of student potential and abilities in both the second and third years in junior high school.

8. It is recommended that the counselors at Lincoln Junior High School be charged, specifically, with placement of students for seventh grade classes, but after the assignments are made, such clerical details as possible be left to non-professional personnel.

Amplification of the Recommendations: The Guidance Staff

Assuming that the proposed program will encompass grades seven through eleven, the minimum number of staff members necessary for an effective guidance program would be:

1. One counselor assigned to each junior high school grade. These counselors would concentrate their efforts in the areas of educational, vocational, and behavioral problems in the grades (or years) assigned. All counselors would work cooperatively, however, in a program of assessment of student aptitudes and abilities.

2. A head counselor, or coordinator, should be in charge of the guidance program, and in particular, he should be responsible for the guidance of students in Curriculum C.

3. One and one-half clerk-typists will be necessary to aid the guidance staff with records, reports, and other secretarial duties.

Amplification of the Recommendations: The Seventh Grade

Since the seventh grade will probably emphasize the elementary school skills and remedial work (See recommendation number 1), the pupils will have to be grouped as accurately as possible in terms of their aptitudes and achievement.

The counselor should be cognizant of two problems in the area of reading which may occur.

1. The location and grouping of students with various levels of reading ability. These students might be classified as follows:
   A. These students who are reading below their general ability level (as ascertained by the Durrell-Sullivan method or some other means).
   B. These students who are reading poorly because of lack of academic ability, or
   C. Those students who are reading at, near, or above grade level.

2. Since some students decribed above may have concomitant psychological problems, consultation with teachers should be provided by guidance staff members.
   A. It would appear desirable to identify monolingualism or bilingualism in the above mentioned groups, since the language habits of these students appear to have an impact on their reading ability.
   B. It would also appear necessary that the counselor work cooperatively with the teachers to develop techniques to overcome or circumvent the educational depression evident in the work of such students.
   C. Psychological problems might be modified by better articulation with the elementary schools which send students to Lincoln Junior High School. It is suggested that language teaching for bilingual elementary school students be based primarily on conversation and writing with relatively little attention given to formal grammar.

The Rationale for the Recommendations

There is a need to emphasize reading at the seventh grade level. This is clearly shown by the existence of a group of pupils who have the capacity to learn to read substantially above their present performance.

Desirability of Early Remediation

It should be noted here that it would be desirable to begin special work earlier in the grades. At Lincoln Junior High School, the experimental grouping demonstrated aptitude in reading areas which was below that which might normally be expected. The mean achievement of this group in the first month was a grade placement of 7.2. This would indicate that almost a majority of the students were achieving work at a level below the seventh

grade—i.e. they were one or more years retarded in reading. This condition exists despite the fact that this group, as a whole, was somewhat retarded chronologically. If simial comparisons were made in relation to the age of the students tested, it would probably demonstrate even more severe retardation.

Emphasis on English Expression and Communication

It would probably be desirable for the counselors and teachers to attempt to classify each child on the basis of monolingualism or bilingualism, for in this manner, techniques for instruction in language arts skills could be developed to meet specific needs. In the area of English expression, available tests are not quite as accurate as those dealing with the actual reading level of the student. Language usage is not so closely related to general intellectual abilities as are reading scores.

Most tests of English involve knowledge of grammar. Such tests will correlate positively with intelligence. In Table II, Appendix, page 36, it may be seen that scores on the **Lorge-Thorndike Intelligence Tests** correlate substantially with both reading test scores and the "Correctness of Expression" sub-test of the **Iowa Test of Educational Development** (ITED). Since a student's ability to express himself orally in English is only in part related to scores on "Correctness of Expression," the use of such tests would not appear to operate in the interests of the students.

Emphasis on Reading Achievement

One main reason for an emphasis on reading achievement would be that most of those pupils requiring remedial reading are those in the bilingual group. Many of these students, lacking tangible school success are prone to early school leaving, and this emphasis, may provide these students with one last chance to acquire minimum educational qualifications.

Secondly, since the program recommended for the second and third years at Lincoln Junior High School (see below) requires the student to be able to do some independent reading, the seventh grade would appear to be the logical place in the school program for the students to acquire simple reading skills.

Amplification of the Recommendations: Second and Third Years

The Function of the Teacher in a Problem Centered Curriculum

The problem-centered curriculum provides a means by which the students may learn about life and their role in it. In a non-problem centered curriculum, even though attempts are made at individualization of instruction by homogeneous grouping, the content is usually poorly adapted to student needs. Since the student is not challenged, he conceptualizes the subject matter content as a body of knowledge to be learned for a specific outcome—a school grade. However, very seldom does the student discover a relation between school and subject matter and his daily needs.

In the problem-centered curriculum, the teacher will be concerned with three main areas. These are:

1. Problems pertinent to the students' educational development,
2. Students' development of their self-concept in relation to their present and future environments, and
3. Adjustment of group projects to the level of the individual students.

It is the function of the teacher to evaluate the students' success attained in different projects, to record descriptions of the projects, and to note the level of the student progress. The teacher should not attempt to give the individual educational or vocational advice unless a desire for such information is expressed by the students. He should, however, be ready to give information about the world of work, especially if this occurs as the outgrowth of a project. Finally, the teacher should also prepare himself to work cooperatively with the guidance staff in the assessment and evaluation of all students within the school.

The Function of the Guidance Staff During the Second and Third Year

Of necessity, the guidance staff will hold primariy responsibility for the program of student assessment, for a program of this type would appear basic to the success of this curriculum plan.

The program of assessment may be divided as follows:

1. During the second year there should be on file the results of a general intelligence test which was given either in the seventh grade or at the beginning of the eighth grade.
2. During the second year there should be an achievement test battery administered at the beginning of the school year. This should be a test battery which gives a fairly accurate picture of students' achievement—particularly in verbal and quantitative areas.
3. During the third year, an additional test should be administered to determine more accurately the aptitudes of the students in two specific areas; verbal and quantitative aptitude. The test to be utilized would be determined in part by the type of verbal ability test administered in the seventh and eighth grades.
4. During the experimental phases of the implementation of the proposed curriculum, another form of the same achievement test should be administered. This test will be used to determine the progress of the students under this program toward the accepted goals of education.*

One natural outcome of a program of assessment would be the development of an extensive program of educational and vocational guidance. However, the research team would add one caution. It would appear desirable for formal educational and vocational guidance of individual students to be concentrated during the third year. In this manner, the guidance would be most meaningful to the student, for it would have an immediate goal—a purpose

*The data was not conclusive regarding the use of a test of mechanical aptitude at the third year level. A special study to determine the validity of such tests in the new program would appear desirable.

which is revelant to the students' immediate existence. The student will be able to work cooperatively with the counselor with relatively specific goals in mind. During the third year, the cumulative record, including school grades, rating of the project attainment as evaluated by the teachers, and the tests previously described would be evaluated by the student and the counselor.

A major purpose of educational and vocational guidance lies in the general development of the individual; that is, understanding himself and his relation to society. This, ideally, should be begun early in order that the pupil will be able to make intelligent decisions in the future. During the second and third years, the counselor may augment this general development in two ways.

1. The counselor should work in cooperation with the homeroom teacher to provide homeroom activities through which the students will be aided in their adjustment to the school and life in the community. These activities might include the organization of occupational life and the general relation of abilities and aptitudes to the occupational world. This can be done in such a way as to motivate students without encouraging a decision regarding a specific occupation.

2. The counselor's function in school behavior cases should be discussed to a limited degree because of the interaction of such behavior with educational and vocational guidance.* The counselor, since he should be competent in all aspects of counseling, should be concerned with individual problems of underachievement. The failing student may be considered a special guidance problem although it is probable that some other social or emotional problem may be associated with his failure. Such cases are an important part of the counselor's responsibility. In solving such problems, the student's self-concept is presumably brought into a more congruent relationship with his potential. This is helpful to the student in two ways:

A. Since the difficulty experienced by the student may come from a lack of reality of aspirational level, the counselor should examine such aspirations carefully.

B. Any improvement in behavior, regardless of source, may result in better ego-development and comparatively rapid increments in achievement.

The Rationale for the Recommendations

The Relationship Between School Achievement, Social Status, and Personality

There is a substantial relationship between the degree of student intellectual ability and achievement and success in future education. Several tests given over a period of time in elementary and junior high school indicate that the correlation between these factors can be as high as .60 or .65. A large number of studies have been made of this relationship. Typical examples of such studies are those of Seashore (25) and Franz **et. al.** (6).

Personality measures correlate with success only on certain traits. Table II, Appendix, page 36, shows that the personality trait of "Responsibility" is more closely related to achievement on a standardized test than is the trait of "Sociability." Of the eight correlations of the trait, "Responsibility," with ITED sub-test scores, four correlations were significant at the five per cent level of confidence, while one more was significant at the ten per cent level of confidence.

In Table II, also, the correlation coefficients for the traits termed "Achievement via Independence" and "Achievement via Conformance" with ITED sub-test scores are presented. From the table, it may be seen that the trait "Achievement via Independence" is correlated to a somewhat higher degree with the sub-test scores than is the trait "Achievement via Conformance." In other words, it would appear that conforming behavior brings small reward to the students of Lincoln Junior High School in terms of academic success, and it would appear conversely true that encouragement of independent school work would offer some potential.

It is contended here that the factors of social status and personality should be used in the guidance aspects of the curriculum in only a limited sense. All school personnel should be cognizant of these factors and their affects on student behavior and attitudes, but it would appear advisable that the use of measures of these factors be made only to provide a conceptual framework within which professional educators may operate. A more detailed discussion of this proposal may be found in a U.S. Office of Education Bulletin (27).

Student Motivation and the Problem Centered Curriculum

A more important aspect of this problem is found in Coleman's work (4), bolstered by some previous work done by Pressey and others brought together by Getzels in the **High School in a New Era** (7). This aspect refers to the persistent theme in education that motivation is the major factor in school achievement. If this factor could be isolated or clearly identified, the progress of a given student through educational sequence could be easily charted. In addition, those students whose combined ability and motivation indicate little progress or interest in school could then be isolated for special assistance.

Motivation as a central theme has produced many by-products. Presently educators are vitally concerned with the problems of under-and over-achievement. Tiedeman and McArthur (32) have demonstrated that the identification of these types of achievement in a school population is extremely difficult.

Some new light has been shed on this problem by Coleman (4). He has attempted to isolate the values of youth and the relationships between those values and school achievement. He predicated that when high school

*For those who did not read the introduction to this section, the following should be stated: The problem of social and personal counseling at Lincoln Junior High School is the subject of a separate analysis which should eventuate in a research program during 1962-63.

students are asked to indicate the occupation which they would like to enter eventually, they would show a strong preference for prestige and/or money-making occupations. A substantial majority of the decisions which the students did make were termed "unrealistic" by Coleman. It would seem that at the Junior High School level, such choices would probably be made from a combination of wishful thinking and ignorance of individual potentialities. This has been clearly demonstrated by the Lincoln Guidance Research Project and by several others, such as Super (33), Leach (14), and Stephenson (28).

Coleman developed a detailed questionnaire which made responses on any one item seem less suspicious and in which the answers had to be given in one or two or more categories on each item. Responses in two areas in Coleman's study are of interest at this time. Item 131 for boys was, "If you could be remembered here at school for one of three things below, which one would you want it to be?" Answers were tabulated, and the results appear below:

Brilliant Student	31.3%
Athletic Star	43.6%
Most Popular	25.0%

(Number of cases: 3696)

Coleman's theory is that motivation is a function of the interaction of the values of a given group.

Pressey and Jones (19) in a study of values among high school students and adults at different ages found that young people today tend largely toward emergent values (defined as socially centered ones) and away from the more traditional values (defined as the individual values of thrift, intellectual attainment, believing hard work will bring success, etc.). This research findings agree with Coleman's and is in line with the social values found by White (38) in suburbia and business and those expressed by Riesman (21) in his psychological analysis of the predicament of Western man.

Getzels, (7) after reviewing the values in American education as shown by the work of Pressey and that of Hutt (12) and Miller (17) and others, comes to the following conclusion:

> . . . the great problem of the modern American High school and . . . certainly the great problem of the high school of the new era is . . . *the full recognition of* the difference in (the students') native ability so that they can make choices concerning the purposes and ordering of their individual lives. (p. 127).

A recent report of the conference on the **Pursuit of Excellence** (20) has highlighted some of the thinking on the subject of the "intellectual problem in schools." Some quotes from their report follow:

> Our conception of excellence must embrace many kinds of levels. (p. 16)
> The objective of all educational guidance should be to estimate the individual to make the most of his potentialities. (p. 30)
> Intellectual excellence has not always ranked high in the scales of values . . . the individual must be exposed to a context of values in which high performance is encouraged. (p. 30)

Gowen, (10) in an analysis of nineteen factors concerning with achievement, has come to the following conclusions:

> "To summarize, achievement is an indication that the individual has successfully transferred a large enough portion of his libidinal drives to areas of cultural accomplishment so that he derives a significant portion of his gratification from them. We need always to consider how an individual is to receive psychological pay for tasks accomplished. The art of education consists in making the new task palatable until the id catches up."

According to his analysis, Gowen thinks it possible that the factors influencing achievement or underachievement which seem important were cultural artifacts rather than traits of personality. This analysis would support Coleman's finding that the values emphasized by a particular group may have more bearing on student motivation than do particular personality traits. The data from the Lincoln Guidance Research Project confirm this.*

From Coleman's work, supported by the other findings presented, it may be concluded that the variation of achievement from that which might be expected is more likely to be caused by values to which the particular group adheres and not so much by individual variations in personality traiits. Poor value orientation, as compared to the value of the majority, may result in poor school achievement, lack of interest in school, and early school leaving.

The Role of Educational and Vocational Guidance in the Second and Third Years

A persistent problem in guidance which has recently become of major importance is the amount and kind of guidance needed for students in junior high school for making educational choices in the ninth and tenth grades. In junior high schools two accepted activities are generally carried on which bear on this problem. One such activity is the homogenous grouping of pupils and some differential placements. An example of this is found in the ninth grade where pupils are placed in algebra instead of general mathematics—or in special science instead of general science. The other activity is the study of occupations. Some individual counseling on educational and vocational plans is often carried on to aid in reinforcing or suggesting other occupational choices. Decisions are made with some consideration of the reality of the choice, insofar as the counselor has data upon which to give advice. Often the student is given additional literature on various occupations. This approach to guidance is a combination of: (1) acquiring information about occupations; and (2) utilizing the student's interest in these occupations through his assignment to certain levels or classes.

Research in the field has been carried on in two general directions—(1) toward the prediction of success in later school work by the use of various factors or characteristics of junior high school pupils which could

*This is supported primarily by evidence available in Table II-IV, Appendix, page 36.

be measured and (2) by longitudinal studies to find the developmental stages through which pupils acquire a choice of careers.

Super and Overstreet (33) postulate that "vocational behavior develops over a period of time, through processes of growth and learning which provide the individual with a behavioral repertoire" (p.7). They then postulate that the study will "increase knowledge of vocational behavior by testing empirically its hypothetical constructs concerning vocational development," so that "later studies of the same boys, using longitudinal data, will examine the predictive validity of our constructs and thus further define them" (p. 12). In plainer language this means that consistent and understandable factors concerning vocational development were looked for in the present research on a construct basis with the idea of seeing if there is any particular validity (predictive or longitudinal relationship) in the individual or patterns of factors obtained in the cross-section study reported by Super (23). The hypothesis of this paper is that the constructs presented by Super cannot be used to establish a guidance basis in Lincoln Junior High School because the data from the study and from other research findings when analyzed indicate that no construct can be evolved, out of the factors, which would be valid.

Another focus for guidance at the junior high school level is then necessary. First, some of the research from the Lincoln study pertinent to the problem of vocational choice will be presented:

1. The results of the use of **Kuder Interest Preference Test** (specific vocational or activity type check) showed no validity to the choices or to achievement. This could be observed by the erratic intercorrelations as measured by the **ITED**, and also by the validity correlation coefficient.*

2. The vocational choices of students in Lincoln Junior High School and also in the other junior high schools in Albuquerque were unrealistic in relation to the ability level of the pupils.**

3. In Lincoln Junior High School the sub-tests of the **Iowa Test of Educational Development** intercorrelated so highly as to preclude the use of the results in differential guidance. Except for the general level of performance such achievement tests are not useful in guidance. Similarly, the four factors of the **MAT** were not generally diagnostic except between verbal and quantitative (this may be deduced from Table VII, Appendix, page 37).

4. The Lincoln data showed a small but significant relationship between "Sociability" and Responsibility" on the **CPI** on the one hand and achievement scores on the **ITED** on the other; but in no other **CPI** personality trait was there any discernible relation with the achievement scores in the ITED (Table II, Appendix, page 36). These results indicate a lack of effect of personality on achievement. Even significant correlation coefficients as between achievement and the "Sociability" and "Responsibility" tests on the **California Personality Inventory** disappear when the factor of intelligence is partialed out.* In the case of the latter point, the application to all junior high schools would have to be made with caution.

5. The relationship of both the general intelligence test (**Lorge-Thorndike**) and the **MAT** on the other hand and the scores on the subtests of the **ITED** on the other—was substantial (Tables I and II, Appendix, page 00).

Studies of occupational choice were originally initiated to discover specific determinants contributing to vocational choice as they appeared in grades six through nine. This attitude still persists. Super and Overstreet state (33):

> "He needs to know what to look for, where to find out about it, and how to develop an understanding of an occupation. He needs a general framework of occupational information, plus a knowledge of how to fill in the details of any part of that framework. (p. 154).
>
> . . . many boys do not make good use of the resources that are available to aid them in their orientation to careers. They tend to know something about the *requirements* of the occupations to which they aspire, but little about the *duties, conditions of work,* and *opportunities* in the preferred occupation. (Italics are Super and Overstreet's, p. 153).

A considerable body of evidence, both from Super's studies (30) (31) (32) (33) and from the Lincoln Guidance Research, indicates clearly that another conceptual framework may be of value in consideration of this problem. The theory is that it is necessary for the school to foster a growth in positive self-concept and/or growth in self-understanding in relation to reality as a means of aiding the student to make real, valid vocational choices.

Super (33) discovered the same tendency at the ninth grade level. Forty-five per cent of the experimental group in his study demonstrated no consistent pattern between their interests and their choice of occupations. If two factors as closely related as those showed so little agreement, it would appear difficult to find agreement between

*Because of the lack of validity of the Kuder Test results, the table intercorrelations of these data with other tests was omitted.

**This conclusion is based upon a previous study made within the Albuquerque Public Schools.

*This can be seen by the operation of the formula for partial correlation:

$$r_{xy \cdot z} = \frac{r_{xy} - (r_{xz})(r_{yz})}{\sqrt{1 - r_{xz}^2}\sqrt{1 - r_{yz}^2}}$$

with the data in Tables II and III in Appendix, page 36. The *r*xyz to be obtained means the correlation between a personality measure (x) and an achievement measure (y) with intelligence measure (z) neutralized or partialed out. Using *r*xy from Table II, between the *CPI* trait of "Responsibility" and the *ITED* sub-tests, "Correctness of Expression," and *r*xz between total intelligence and "Correctness of Expression," and *r*yz from Table III between intelligence and the *CPI* trait of Responsibility, and substituting the formula

$$r_{xy \cdot z} = \frac{.42 - (.70)(.42)}{\sqrt{1 - (.70)^2}\sqrt{1 - (.42)^2}} = .23$$

The same type of reduction to a partial correlation coefficient substantially lower than the original correlation will occur in all the coefficients in Table II as between each of the scores on the sub-tests of the *ITED* and the four personality trait measures.

other factors in vocational choice. Super found, in fact, that there is no relationship between interests and any of the several other indices of vocational maturity which he developed.

Other investigators, among them Walther (31), Samuelson and Pearson (22), Schmidt and Rothney (23), and King (13) have reported similar results. At college level, Matteson reported only a "moderate degree of relationship was found to exist between academic interests and experience" (16).

As an adjunct to the observation that interests are not valid indicators either of specific occupational preferences or of any internal organization related to the life of the student, we find that the occupational preferences themselves, at the junior high school level, are unrealistic. Many studies which highlight these unrealistic choices have been made (2) (14) (28) (29). A comprehensive study of this motive has been carried out by Super (33). He found that the correlations between the aspirational level of the student and the appropriate courses taken in school was .20 (significant). Other correlation coefficients between aspiration level and intelligence (.32) and between aspiration level and marks in school (.31) were also significant. The small degree of relationship would probably be due to the fact that practically all students who are intellectually able will tend to choose occupations which may be considered to be prestige occupations.

Holden's research (7) indicates that the choice of students changed materially from grade eight to grade eleven when the students had intelligence quotients below 110. One might then hypothesize that there is a group of pupils who, because of family status and inherent intellectual abilities, do not change their occupational choice as drastically because their original choice, in light of their resources, was highly realistic—although accidental.

The field and documentary evidence on the use of preferences or interests at the junior high school level cited indicate that preferences or interests cannot be used in prediction and that if they are a part of the development toward vocational maturity it is because researchers have found them to be elements of the school program. In other words, because such elements as vocational preferences and interest scores are used in schools and appear to be a part of the development of occupational choice, it does not necessarily mean that they are valid. It may mean that this whole concept should be reexamined.

Super (32) in the conclusions of his latest research report presents some interesting theories. His findings indicate that there is no wisdom and consistency to ninth grade vocational preference (using such factors as age, interests, school achievement, adjustment, etc.). He then, however, draws these implications:

> "However, one would be reluctant to draw the conclusion that the preferences themselves, even if inconsistent or otherwise, should be disregarded, for this would involve not only the assumption that the counselor knows better than the pupil what is appropriate for him but also the assumption that the best way to help the pupil to choose and plan wisely is to get him to concentrate on data coming from without himself rather than to examine his self-concept in relation to external and impersonal data. The demonstrated, even though far from perfect, validity of aptitude, achievement, and interest test data make it clear that the counselor does indeed have unique externally derived information as to what is appropriate for the pupil."

The present writers would say that it is clear that a good counselor does know better than the pupil what is appropriate for him. In fact, it must be so unless our educational and vocational counseling is to be put on an "indirect" basis. However, this again, has been proved to be difficult by the evidence presented (including Super's own evidence).

Super assumes that:

> "This is best done by beginning, not with the data, but with the self-concept. And the statement of a vocational preference is one way of expressing a self-concept, as Bordin (1943) and the present writer (1951) have pointed out."

His whole case for this assumption rests, therefore, on "and the statement of a vocational preference is one way of expressing a self-concept." (Italics ours). At this age and grade level there are many important aspects of self-concept which can be developed and eventually aid in the self-concept relative to occupations. Research to date seems to prove that self-concepts at this age are multi-dimensional and the occupational aspects of the self-concept probably evolve at a later period than during junior high school for most students.

Three other approaches to this problem will be mentioned.

1. The interest-aptitude discrepancy in relation to achievement had been studied by few investigators. Worell (36) found that the greater this discrepancy, the lower the achievement in relation to the pupil's potential. The result of Nugent's (18) investigation supports this finding and showed further than such discrepancies became of greater impact in lowering achievement and adjustment in the eleventh grade than in the ninth grade. Nugent suggests that counselors should attempt to help these individuals as early as possible.

2. Birdie (2) established that interests were more important in choice determination among high school students going to college than was aptitude. This shows the seriousness of the use of interests at the high school level for college entrance in view of the weakness in their use as discussed here at length.

3. A recent study by Schutz and Blocher (24) concerned with self-satisfaction and level of vocational aspiration conclude: "Clients with unrealistic levels of vocational aspirations are not uncommon problems in counseling. The results of this research seem to suggest that such problems could be approached, at least in part, by working on the client's attitude toward himself rather than by focusing primarily upon his attitudes toward the world of work."

From this analysis of the evidence, both from the Lincoln Project itself and from the literature, we conclude that valid educational and vocational choices cannot realistically be made by many of the students in the junior high school.

Educational and Vocational Guidance During the Third Year

The major recommendations made by the research team concerns the three curricula which the student may enter on completion of the third year at Lincoln Junior High School. They are important because of three primary reasons:

1. It is felt that students in these curricula will demonstrate higher achievement because of superior motivation for school work and less anxiety concerning matters with which the students cannot successfully contend, due to their inadequate self-development and knowledge of life.

2. It is felt that students in these curricula will demonstrate a better and happier adjustment between the abilities of the individual student and his chosen occupation.

3. It is felt that the three curricula will demonstrate clearly a more efficient distribution of manpower and ability within the community.

At first glance, it would appear that this recommendation postpones some possible student choices until the student reaches the end of his third year in junior high school. This premise is doubtful if one considers that the students now feel that often they must choose and they proceed to do so on the basis of invalid or incomplete information.

Further, we would encourage the consideration of both verbal and quantitative aptitudes for the guidance of these particular pupils. The research team would not, however, recommend the use of these aptitudes in the placement of students in a given curriculum.

At Lincoln Junior High School, the verbal and quantitative aptitudes are the only ones which appear to be significantly related to educational activities. This is shown by the intercorrelations of the **ITED** (Table II, Appendix, page 36). The quantitative thinking scores, and to some extent, science scores, correlate to a lesser degree with tests which require verbal thinking. The converse—verbal scores correlate to a lesser degree with science and quantitative scores—is also true. This is further supported when one consults Table I, Appendix, page 35, for Factor I of the **Multiple Aptitude Test** (Verbal) correlates well with **ITED** sub-tests which require verbal ability, while Factor III (Numerical) correlates to a lesser degree. Similar differences were found for the other tests used.

It may be stated, then, that these two aptitudes can be of value to the counselor and the teacher in terms of individualizing educational experience within each of the three recommended curricula. The diagrammatic presentation (below) indicates possible relationships between general intelligence levels and possible curricular choices.

In the diagram, the general levels have been expressed through I.Q. levels. This has been done for the sake of simplicity. It should be understood that these levels will be determined by a combination of intelligence scores, standardized achievement scores and the evaluation of teachers' marks. Under the proposed Lincoln Curriculum, it may be confidently expected that many students will raise their general level of knowledge. There should be more students going into the curriculum I and II being graduated from Lincoln than there are now. The sociological study at Lincoln (5) shows why this is probable. Of course, the better guidance procedures here recommended will of themselves provide better identification of students who have the potential to go to college.

The table (page 15) gives the percentage distribution of youth by age and grade as well as figures for those who have left school. An examination of this table reveals several things. One is that youth in Albuquerque are almost universally enrolled in school during the compulsory school period, **i.e.**, to age 17 and that beginning with age 17 pupils leave school rather precipitously. The other point to note is that the number of pupils retarded one year or more from the average increases rapidly from the first grade where 11 per cent of the seven-year-olds are placed (some because they were not promoted to the second grade and some because they entered late) rising to 17 per cent in the eight year level; 21 per cent at the nine year level; 22 per cent at the ten year level, etc., increasing to 36 per cent at the 13 and 14 year levels

General INTELLECTUAL Level (Expressed in I.Q.)	EDUCATIONAL CURRICULUM	Percentage In General Junior High School Population*	Lincoln Junior High School Population
I Intelligence Quotient 102-up	General and College Preparation in High School	50%	16%
II Intelligence Quotient 92-112	Emphasizing vocational education in high school On graduation, student is prepared to enter apprentice training on some higher stage in skilled trades. Ready for industry training in technology below junior college level.	48%	38%
III Intelligence Quotients 70-92	Lincoln School—Extended Junior High School education for one or two years. Prepared directly for service, some semi-skilled and unskilled occupations.	26%	58%

*The mean and standard deviation in the general junior high school was 102 and 15 respectively.
The mean and standard deviation used in Lincoln Junior High School population was 89 and 13 respectively. The overlap of intelligence between group I and II in general population is 24 per cent, in Lincoln Junior Hihg School population the overlap is 12 per cent.

and then decreasing rapidly at the 17 year level, being only 19 per cent, at the 18 year level, 14 per cent, and at the 19 year level, 8 per cent. This phenomenon is directly contrary to the percentage of accelerated pupils in the ages concerned rising from 2 per cent at ages 6 to 7; being 5 per cent or 6 per cent at ages 11 and 12 and remaining at about the same level for ages above 12. This means that many of those who are educationally retarded tend to leave school when they reach the age of 17. Many other normally placed pupils leave school at these ages. The actual number of these pupils exceeds that of the retarded pupils who leave school, although percentage-wise the educationally retarded group is the larger. These facts indicate that many students leave school because the schools do not fit their ability and/or many more leave because they are not motivated by the curriculum offered to them. It is true that financial pressure is an influence of considerable importance even at age 17 and is responsible directly for some leaving school at about that age.

In a study (26) of 14 metropolitan school districts, about 40 per cent of the students in grades nine through twelve were found to have left school. About 19 per cent of this group left school to enter the labor force. It is probable that many of those who left for other reasons—in such categories as "needed at home," "enlistment in Armed Forces," and "whereabouts unknown,"—left school because of financial problems which forced the student to seek employment. In regard to continuing education from high school—and on through college—the financial pressures increase markedly. Of course, college students are a highly selected group, but it would appear that the same financial pressures could and would often operate on the student in high school as well. For example, Wright and Jung (37) report that of the top ten per cent of the 1955 Indiana High School graduates, 38 per cent stated that the cost of further education was prohibitive. The combination of an inadequate guidance educational program and financial obstacles cause many students who have potentialities not to realize them, while at the same time many students who aspire to higher training would be better off in the regular high school and college sequence leading to some other type of school training or to a job. This is shown in part by Figure I which gives the approximate distribution of the attainment of regular schooling obtained by pupils in relation to the general level of intelligence. A line has been drawn at 110 I.Q.* which is the level usually recommended for college training. This figure indicates that many pupils even above 110 IQ are not graduated from high school, that large numbers of them do not enter college and, still less are graduated from college. There are some students at Lincoln Junior High School who measure above 110 IQ in potentiality but these are likely to be discouraged—because of low-socio-economic status combined with a lack of finances—from attempting to enroll in college. Others in the Lincoln Junior High School are, according to the sociological analysis, not encouraged to develop to their full potential. If the latter pupils can be motivated and have their language handicap ameliorated during their elementary and junior high school period, they may well improve their ability to do good work in senior high school as well as in college.

However, at present, and also in the future, there will be a large number of pupils at Lincoln who will cluster around the probably normal IQ in low socio-economic neighborhoods in Albuquerque of about 88 (IQ). About one half of these students need a different type of education (as described in Chapter III) and need a more intensive, if not different, type of guidance program.

Since the problem centered curriculum is so structured as to encourage students' evaluation of the outcomes of class activities and of individual contributions, student

*The term IQ is used to simplify the discussion. The scores used are actually *AGGT* scores which approximate IQ's.

PERCENTAGE DISTRIBUTION OF YOUTH BY GRADE FOR AGES 6 TO 20 IN BERNALILLO COUNTY

	AGE*													
	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.8	98	11	-											
2.8	2	86	17**	2										
3.8		3**	79	19	3									
4.8			1	75	19	3	1							
5.8				4	74	21	4	1						
6.8					4	96	23	5	1					
7.8						7	65	30	6	1				
8.8							7	59	29	5	1			
9.8								5	58	28	5	1		
10.8									6	60	18	3		
11.8										6	54	15	2	
12.8											6	42	12	
13.8												6	30	8
14.8													5	26
15.8														5
Left School											16	33	51	61

*Age means at last birthday; *i.e.*, age 11 means 11 to 12.

**There are few pupils who are more retarded or advanced than those given in the percentages for all ages. These number much less than 1%—usually one to five pupils.

evaluation of personal potentialities in relation to tentative educational and occupational plans should be easier to initiate and direct within a counseling interview. Too, delaying these decisions until the end of the third year will allow the student further time to mature, and undoubtedly, this extra time will help the late bloomers and the bilingual students who are slowly overcoming their bilingualism. However, it would appear that at this point, the guidance worker must be aware of potential dangers.

Ginzberg (8) (9), after studying the problem of vocational choice, has finally arrived at the conclusion that there is a need for a better educational and vocational guidance based upon the ability of the student. At present many counselors hesitate to attempt this, partly because of

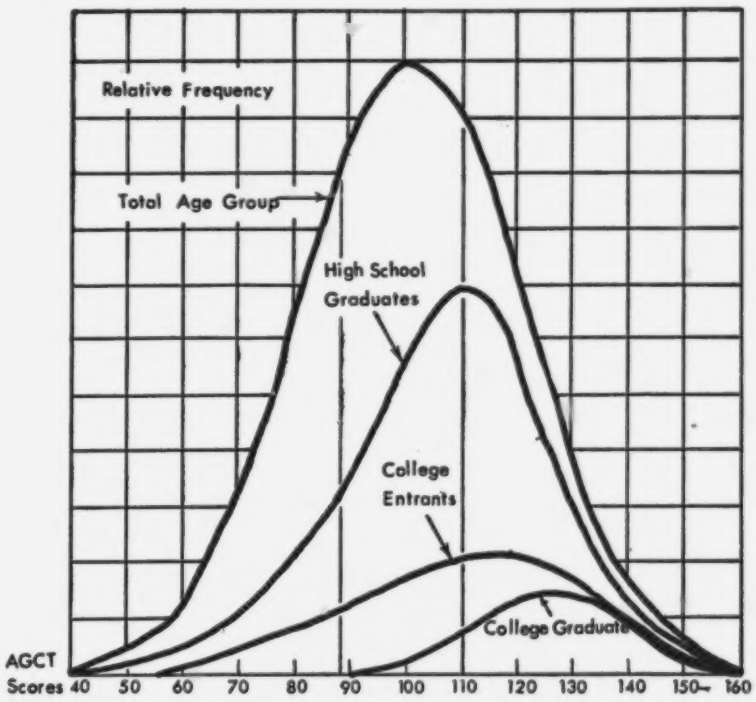


FIGURE I
FREQUENCY OF AGCT SCORE IN RELATION TO LEVEL OF EDUCATION*

their lack of convictions regarding the use of these data in the counseling interview, but more because they find that this type of counseling is threatening to them. Caplan (3) arrived at the same conclusion.

Another study by Davis (5) seems to support this point of view. He studied a training program to aid doctoral level students in guidance and found that:

> "Some counselors will feel that the information imparting aspect of counseling is relatively unimportant, in fact incompatible with the crucial classification of feeling formation. In this therapeutic frame of reference, test data of any kind is generally held to be relatively unimportant."

Summary

If, then, vocational maturity at a level needed to make intelligent choices is not achieved in the junior high school student, a new focus for that junior high school guidance program is necessary.

There are two centers to this focus. One is that which relates to aiding students in a search for a more realistic self-concept. The positive side of the research at Lincoln and the additional research cited indicates that pupils need more understanding of themselves and of the world at large before they can reasonably make choices. They must be able to see a connection between themselves, realistically, and the occupational life of our society. This they cannot do until they have achieved some intelligent position in regard to each element. This should be done through the whole school curriculum with the aid of all school personnel—counselors, teachers and administrators.

The other center of focus lies in the guidance procedures to be used in this junior high school in view of the inability of such students to make intelligent choices of courses and occupational goals. Toward the end of the ninth grade the counselor should make an evaluation of the cumulative data on the ability and achievement of the pupil. The research evidence indicates that this tentative evaluation should minimize such factors as social status, interests, and personality traits. Upon the basis of this evaluation the counselor would then make a tentative selection from the three curriculums which he thinks the pupil is best fitted to follow upon leaving the ninth grade.

The three curriculums are briefly:

1. The regular high school curriculum
2. The vocational high school curriculum, and
3. An extended two years in the junior high school in a prework and work experience.

The first two of these curriculums are well known. The third is described in the Curriculum Chapter of this report.

Amplification of the Recommendations: The Tenth and Eleventh Years

The problem of guidance for those students who enter Curriculum C—The Lincoln Community School—is primarily one of coordinating the school program with occupational opportunities within the community. The special emphases or features of this program would be:

1. The guidance worker will be in touch with the occupational world and, for this reason, he should be a part of the curriculum committee which develops the preoccupational curriculum within the tenth grade and the cooperative work-experience program and the terminal education offered in the eleventh grade. The curriculum of these grades should be flexible and responsive to changes in the occupational structure of the community.

2. The counselor should make regular occupational surveys, make contacts with potential employers, and work closely with the local employment office.

3. The counselor should interview each student during the student's tenth year to aid in the selection of an area

*After Segel, *et al.* (27)

of work for the coming year. During the eleventh year, the counselor should coordinate the work-experience program. He should continually evaluate the training given in the occupational areas and note the number of students who have continued employment in the same occupational area for a number of years. He should seek a direct transition to a full-time job immediately upon the students' termination from the work-experience program.

The rationale for guidance at the tenth and eleventh years of the extended program proposed for Lincoln Junior High School arises out of the development described for guidance in grades eight and nine and requires no special justification at this point.

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CHAPTER III

Curriculum

The problem of educating students from lower socio-economic level communities is complex. The research team would submit that there are both sociological and psychological characteristics of the community which tend to negate the typically middle-class orientation of the school toward educative processes.

This problem is further complicated by the fact that the children and the families in such a community place different values on many behaviors than does the professional staff of the school. Attempts to educate the children with typical methods, or any attempt to motivate these children with such future-oriented symbols as school grades, are likely to fail. The investigators would submit that a different pattern of education and differing faculty behaviors are necessary if their children are to benefit fully from their school experience.

The recommendations which the research team has made are not new creations. Most of the approaches recommended have existed or have been suggested many times in the past by educational authorities. However, the pattern of use and the intensity of utilization of these techniques is, to some extent, unique, and the research team feels that this pattern of methodology can be beneficial to the students in question.

In the discussion which follows, several concepts which the research team feels to be of importance will be discussed. The recommendations will be presented first, and a brief discussion of the role of the teacher, student motivation, and the rationale for the recommendations will follow in turn.

The Recommendations

1. We recommend that the seventh grade at Lincoln Junior High School be established as a major attack area upon all basic skills with intensive remediation being offered to all students at this level who would benefit from such coverage.

2. We recommend that the instruction in the eighth and ninth grades at Lincoln Junior High School be placed on an ungraded basis.

3. We recommend that all students in the second and third years of attendance at Lincoln Junior High School be required to enroll in two block courses, each of which will meet a minimum of 110 minutes per day. We would identify these courses in the following manner: Block I—English-Social Studies curriculum, and Block II—Science-Mathematics curriculum.

4. We recommend that all academic courses taught at Lincoln Junior High School follow a problem-oriented approach to the education of the students.

5. We recommend that the instruction of pupils in all courses be done on several bases through the use of teaching teams wherever and whenever possible. Of necessity, this approach to the educational program would include amounts of large-group instruction, small group instruction, and individual conferences. Due to the limited number of classrooms available on the Lincoln Junior High School campus, we would further recommend that adequate educational facilities be made available.

6. We recommend that the subjects, other than the four mentioned in the block courses, be utilized primarily to supplement learning gained in the block courses. The industrial arts, home economics, chorus, and band courses would then be coordinated so that primary learning may be reinforced through specific attack upon phases of a problem situation.

7. We recommend that all students at Lincoln Junior High School be required to take physical education for one period per day unless they are physically unable. We further recommend that the present physical education program be revised to include equal emphasis on both interscholastic competition and intramural activities.

8. We recommend that one period of the school day be set aside for a comprehensive homeroom-guidance period.

It is further recommended that on certain days during each week the period be devoted to a variety of club activities.

9. We recommend that the aptitude, abilities, and performance of each student at Lincoln Junior High School be continually re-evaluated by both the student and the teacher. This evaluation would serve two main purposes: (a) it would allow for adjustment of the student's assignment within the classroom, and (b) it would allow the counselor and the teacher to derive information which would be of some value in recommending the student's further education.

10. We recommend that, at the end of the third year in Lincoln Junior High School, each student have a minimum of one interview with the counselor. This interview would have as its purpose the establishment of realistic educational goals for the student. Each student would be encouraged to enter one of three possible curricula, depending upon his overt aptitude, ability, and performance.

Curriculum A. The pupil who is academically able will be sent on to high school with credits in the fields necessary to allow him or her to enter the regular academic courses in high school which would lead to graduation and possible college entrance.

Curriculum B. The pupil whose achievement and aptitude are lower than a specific minimum would be granted sufficient credits to allow him to go on to a vocational training program at the high school level. This course would allow high school graduation and eventual entrance into skilled vocational areas.

Curriculum C. The pupil whose aptitude and achievement demonstrate less than high school capabilities will not be encouraged to go on to high school. Rather, it is recommended that he be encouraged to enter a two year program in a school which is administratively connected to the junior high school, but not necessarily on the same campus. During the two years of further education the student would work in an intensive work-experience program. In order that the students in this program might avoid the stigma which might well be attached to such a program, it is suggested that upon completion of courses offered during the school year, the student be issued a Certificate of Completion from the Lincoln Community School. This would allow the student to enter a vocation in one of about 30 per cent of the occupations in the community which do not require high school graduation for employment.

Rationale: The Role of the Teacher

The research team feels that within the proposed curriculum, the role of the teacher may shift from what might be considered a traditional one—wherein the teacher is solely responsible for instruction in subject matter—to a more guidance-oriented approach. This does not mean, however, that the team would devalue the appropriateness of the truly educative role of the teacher. Rather, it is the opinion of the team that the guidance-oriented role will strengthen and augment the traditional role. This shift in orientation may be more clearly delimited if the problem of teacher effectiveness is considered.

Teacher Effectiveness as a Criterion of Education

The problem of identification of the effective teacher is a vexing one, for when one asks, "What teacher qualities lead to the effective education of all children in a given classroom?", the identification of the variables is difficult. Ryans (14) suggests that:

> Measured intellectual abilities, achievement in college courses, general culture and special subject matter knowledge, professional information, student teaching marks, emotional adjustment, attitudes favorable to students, generosity in appraisals of the behavior and motives of other persons, strong interest in reading and literary matters, interest in music and painting, participation in social and community affairs, early experiences in caring for children and teaching . . . . history of teaching in family, size of school and size of community in which teaching, cultural level of the community, and participation in avocational activities, all appear. . . to be positively correlated or associated with teacher effectiveness in the abstract. (p. 1490).

However, at the same time, it should be noted that others, among them Mitzel (13) state that, "More than a half-century of research effort has not yielded meaningful, measurable criteria around which the majority of the nation's educators can rally. No standards exist which are commonly agreed upon as the criteria of teacher effectiveness." (p. 1481). The dilemna appears to lie not in the identification of casual characteristics, but rather in isolation of the most highly related factors which contribute to teacher effectiveness.

The research team has attempted to define teacher effectiveness in terms of flexibility. The definition used was, the flexible teacher is the one who can adequately challenge all students at any level of intellectual ability in a framework of integrated course offerings. The definition was developed and molded by two main conceptualizations which the team felt to be of primary importance: (a) the flexible teacher must be highly perceptive of individual differences within his classroom, and his behavior toward the students must demonstrate this, and (b) the flexible teacher must know and use many methods of coping with these differences in a manner which is educationally meaningful to the student.

The criteria by which one measures teacher effectiveness, the identification of factors contributing to teacher effectiveness or the flexibility of the teacher all contribute toward one goal: The instruction of the student to the limits of his capacity. The question of which term or which criterion to use in defining effectiveness is meaningless in the face of this pragmatic consideration: How well does the child learn?

However, another question may well be considered simultaneously with the one cited above: How well does

the school and the professional school staff meet the needs of this child? One aspect of this question has received extensive attention by the research team. The sociological and psychological aspects of the student behaviors and attitudes toward school certainly may affect student motivation to learn and learning as well. Although the research team has treated this problem at greater length separately (11), some consideration of these factors would appear necessary to full appreciation of the reasons for the team's recommendation of curricular changes.

Rationale: Culture and the Student

In an attempt to delimit the effects of culture and class upon student motivation and achievement, the research team has attempted to direct its efforts in two major directions: (a) a review of present literature in the field, and (b) a study of culture **in situ,** using such methods and instruments as were readily available. In light of the fact that the investigators feel that each of these approaches has much to offer, they will be considered separately.

The Literature

Although culture, **per se,** has been investigated in many contexts, not many authors have addressed themselves to the problems of the effect of conflict of cultural patterns between the school and the community in which it is located. Though this is not too surprising, for the problem exists mainly in larger urban areas, the need for such studies has been voiced by educators for years.

Sanchez (15), in a preliminary study of the culture and resources of Northern New Mexico, noted that:

> The language problem illustrates the inadequacy of current instructional practices. Imagine the Spanish speaking child's introduction to American education! He comes to school not only without a word of English *but without the environmental experience upon which school life is based.* He cannot speak to the teacher and is unable to understand what goes on about him in the classroom. He finally submits to rote learning, parroting words and processes in self-defense. To him, school life is artificial . . . The school program is based on the fallacious assumption that the children come from English-speaking homes—homes that reflect American cultural standards and traditions. (pp. 31-32). (Italics provided).

Kvaraceus and Miller (9) discuss the problem of cultural differences in a non-educational context. They are concerned with the culture of the lower-class youngster, and they have hypothesized that these children exhibit behaviors which are sufficiently similar to allow a designation of "culture" to be applied.

They note:

> . . . That a non lower-class youngster who becomes involved in delinquency is much more likely to be emotionally disturbed than not; that some lower-class delinquent youngsters may manifest emotional disturbance, but their proportion is small compared to those who do not. But for the purposes of this report, it is most significant in illuminating the fact that the *preponderant proportion of our "delinquent" population consists of essentially "normal" lower-class youngsters.* (p. 55). (Italics in the original).

Coleman (5), on the other hand, studies the adolescent as an example of a sub-cultural group with mores and responsibilities of its own. He studied the responses of students from ten midwestern high schools to a prepared interview form. Interestingly, the responses of the students appear to support his hypothesis that this segment of our society does in actuality form a somewhat separate cultural group.

Another approach to the study of culture and its possible effect upon students in the classroom would lie in the identification of the values which the major cultural groups in the community hold. Kluckhohn and Murray (7), in an introduction of one major section of their book, note that:

> The values imbedded in a culture have special weight among group membership determinants. A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action. It is thus not just a preference, a desire, but a formulation of the desirable, the "ought" and "should" standards which influence action. (p. 59).

Both Miller (12) and Kluckhohn and Strodtbeck (8) have attempted investigations of the values or the value orientation of specific economic or ethnic groups. Miller identified the four focal concerns of lower-class youth—trouble, thrill, fate, and fall. These concerns, as identified, would appear characteristic of any economic class, but it may be argued that the intensity of the concerns would allow discrimination of lower-class youth from those in other classes.

Kluckhohn and Strodtbeck (8), on the other hand, present five major value orientations which might be conceptualized as culturally universal. These are identified as: (a) Human Nature, which describes mans' conceptualization of the innate goodness or evil of human nature; (b) Man-Nature, which describes man's conceptualization of his relationship to nature; (c) Time, which describes the temporal focus of a given culture (**i.e.** past, present, and future); (d) Activity, which describes the orientation of the culture toward accomplishment; and (e) Relational, which describes the culture's evaluation of man's relationship with others.

Through use of a guided interview, Kluckhohn has been able to demonstrate forcefully that variations in value orientations do exist. If the contention made were developed logically in an educational context, it might be argued that the lack of motivation which many students exhibit is not really a rejection of the values of the school, but rather a manifestation of their acceptance of differing values which are more meaningful to them in their present environment. It would also appear that it could be argued that if the children do not learn, the fault may lie with the school, for if instruction were adapted so that it was more congruent with the values of the children, they would be in a better position to accept it.

The Culture of the Lincoln Junior High School Community

Some of the tests administered to the students at Lincoln Junior High School appear to reveal some aspects of the students' attitudes toward the school and the value which they place upon education. Table E, Appendix, page 35, summarizes mean student scores on the **California Personality Inventory (CPI).**

In light of the fact that mean student scores on the trait of "Dominance" are considerable higher than the other means, it seems likely that these students tend to be somewhat more hostile toward the school and educational processes. It is not surprising therefore that student and teacher frustration in school is markedly higher at Lincoln Junior High School.

It should be noted that the mean scores on "Capacity for Status" are quite low. This would appear to indicate that the child finds some difficulty in discovering opportunities for self-enhancement or self-realization. When these two extreme scores are taken together, it would appear that the problem of youth from different cultures within a typically middle-class school are great.

Correlations of information gathered on the CPI with other tests which were utilized appears to lend further credence to this point of view. Table I, Appendix, page 35, summarizes the correlations between the CPI and the **Mutiple Aptitude Test** (MAT). and Table II, Appendix, page 36, summarizes the correlations between the CPI and the **Iowa Test of Educational Development** (ITED).

When the correlations appearing in these two tables are compared, it appears clear that the traits of "Sociability" and "Responsibility" are closely related to both aptitudes and achievement within the school situation. However, from actual observation within the school, it is evident that these traits are not encouraged in appropriate ways, for the students are hostile, and they are defensive, and they are unable to find the status which they appear to feel is necessary.

One caution to the reader may be necessary. The possible value orientations, the focal concerns of similar groups, and the actual psychological and sociological data developed by the research team would appear to clarify the task of the school insofar as the education of students from this community are concerned. However, although the investigators, in writing this report, have been forced to speak of the population of this community as being relatively homogenous in nature, this is not the case. There are, within the school, many children who would exhibit behaviors which are quite consistent with suggestions from the literature and the research findings. At the same time, there are many children within the school who have initiated some part of the processes of acculturation to middle-class values. These children can and do learn in the usual school program.

The task of the school is to educate all children. Thus, although present techniques are sufficient for the adequate education of a limited number of students, if the school is to serve as a universal educational institution, the research team's task was clear. It was necessary to search for methods which would (a) insure the continuing education of those who have potential and are sufficiently acculturated to benefit from presently utilized educational techniques, and (b) assist those students who have not yet begun acculturative processes, or who have been acculturated only on minimal levels, to find means of developing motivation for and interest in further education. The recommendations which have been made are based upon this predication.

The Rationale for the Recommendations

Recommendation 1: **'...the seventh grade...be established as a major attack area upon all basic skills with intensive remediation being offered to all students at this level who would benefit from such a program.**

This recommendation was made primarily because of the nature of the present research design. The investigation was supported by National Defense Education Act Funds, and thus, the research team has not felt able to recommend changes in the elementary school curriculum—where changes of the type recommended would probably alleviate the problem to a greater extent. The research team, within these limits, would feel that the seventh grade would be the logical place for the junior high school to attempt remediation. If the level of instruction were brought closer to the actual potential of the children, it would appear that (a) learning would increase, and (b) successful school experience would tend to lessen frustrations and anxiety on the student's part, thus allowing him to learn even more effectively. The theory and research on these points is discussed by Bernard (2). In addition, school practice based largely on a trial and error basis also supports this view, as Jewett, Hall **et al.** (8) indicate.

It should be noted that remediation at this level may be of considerable assistance to bilingual students. Correlations between bilingualism and the "Correctness of Expression" sub-test on the ITED (.76)*, the "Verbal Aptitude" and "Numerical Aptitude" sub-tests of the MAT (.29, .23), and the Verbal Intelligence Quotient of the **Lorge-Thorndike Intelligence Test** (.27) all support this contention clearly.

Since, in computation of the preceding correlation coefficients, the research team assumed that the English-speaking (monolingual) group was the higher, the correlations for the English and Spanish-speaking (bilingual) students would be negative, and all of them would be significant at the one percent level of confidence, suggesting that remediation would offer the school a means of improving students' actual and test performance.

The research team, in collaboration with a committee appointed by the superintendent to discuss the feasibility of the recommendations, developed several considerations which appear central to this recommendation.

*These correlations appear in Table V, Appendix.

It was felt that there was need for careful consideration of the work of the elementary school in remediation, for it was felt that the elementary school is the logical place for such attempts to be initiated.

The team and the committee agreed that attempts at remediation should be made only if they were necessary and if the students in the program would benefit from such a program. It was pointed out that some students who presently attend the school have such limited intellectual capacity that attempts in this direction would be fruitless. It was agreed that education for such students should not have remediation as its focus. Rather, it would appear that practical training might be more realistic.

The committee and the research team noted the need for a planned secondary emphasis on social behavior in all classes on this level. In this manner, the students would not only learn school subjects, but acculturation could be encouraged throughout the junior high school. Of necessity, specific techniques to carry out these aims would have to be developed cooperatively with the instructional staff.

Recommendation 2: "**. . .instruction in the eighth and ninth grades. . .be placed on an ungraded basis.**"

The research team's reason for making this recommendation was a pragmatic one. Often, within the school, retentions and retardation in grade produce an adverse effect upon student motivation to learn. By eliminating at least an overt, school-sanctioned form of categorization of students, a beginning toward alleviation of the problem would be made. In addition, this situation would allow students with special talents in some area such as English-Social Studies, to work with a third year class rather than a second year class where he might belong on the basis of time spent in school. At the same time, if the student needs work which is more common to a second year class than a third year class, his placement in an ungraded class offering such work would probably be less painful.

It is contended that the elimination of rigid class structure may assist the teacher and the administration to take a more flexible individually oriented approach to the placement of the students in a given class. In addition, it should be noted that such a basis would also allow those students with special abilities and aptitudes to move up through the junior high school within a two year period of time should this be deemed desirable.

Recommendation 3: "**. . .that all students in the second and third year of attendance. . .be required to enroll in two block courses. . .Block I: English-Social Studies. . . Block II: Science-Mathematics. . .**"

Recommendation 4: "**. . .that all academic courses taught . . .follow a problem-oriented approach to the education of the students.**"

The block class system and the problem-oriented approach are recommended for the second and third year students at Lincoln Junior High School because these are methods which appear to offer improved student motivation. The elementary school has been moderately successful in motivating students for four main reasons: (a) students can observe their progress in such skills as arithmetic and spelling, (b) the learning activities are coordinated with other activities (which could be said to be an application of the problem method), (c) the elementary students are, in the main, too immature to feel confident in criticizing the methodology of the school, and (d) elementary school students need to adjust to one teacher rather than to several during the school day.

The research team feels that junior high school subject matter may be uninteresting and unmotivating to these students because they are unable to relate the materials presented to their immediate needs. Students, by the time they arrive in high school, are able to achieve some degree of self-motivation more easily because they are able to connect their education to their future goals: High school graduation or college entrance. In this case, school work becomes a part of the student's career pattern.

Lack of interest in course work is particularly visible at Lincoln Junior High School. School work appears to offer little to the students in terms of motivation, and because of this, student achievement, as measured by standardized tests, is markedly low. It should be noted that achievement is low for the students in this junior high school even when the factor of intelligence is partialed out. This view gains some support from the findings of Shaw and McCuen (18) for they found that there is a tendency toward low achievement for groups of students who lack sufficient motivation.

Segel (16) states that:

> In general, motivated behavior or activity will be greatest when the school program encourages or facilitates growth of the individual according to the principles set down in Sections I and II. These principles indicate that the curriculum must be planned to fit the maturing individuals. It must not present problems beyond the individual's capacity. Since each individual grows at his own rate and has an individual type of growth, the school must endeavor at all times to discover these individual tendencies and take them into account. Since the individual advances through the interaction of all types of activities, social as well as intellectual, the school must provide opportunity for the individual's self-enhancement, the program must be specifically planned for this, that is, it must provide real motivation for the individaul. In general, this means that the work must be made meaningful for each individual.
>
> . . . . . .
>
> If it is accepted that the basic need in life is the preservation and enhancement of the self, then the most important function of the school is to provide learning activities which will help youth to satisfy this need in ways which are acceptable to society. The principle indicates that the student, will, in any event, direct his attention to those parts of the environmental field which can have personal significance for him—those aspects which can contribute to the satisfaction of the need for maintenance and enhancement of his phenomenal self. The traditional high school too often is concerned with teaching things which the student may have to use some time in the future with little attempt made to relate them to present pupil needs and interests.
>
> One of the ways widely attempted by schools to supply enhancement to pupils is school marks. For many pupils, marks are acceptable goals, and the material presented is accepted as valuable with passing of examinations and reciting satisfactorily in class as periodic indicators of success. For other pupils, marks become ends in themselves; such pupils are likely to drop consideration of the area subject matter the moment they

know the marks they will receive.

The worst aspect of the situation occurs when a pupil finding the materials distasteful, is nevertheless forced to take them in order to receive a passing mark. In such cases, the learning may have a negative value since the materials are not only rejected at the time of study, but may be earmarked as undesirable. A rejection for that type of material is set up in the individual's system and except for traces of remembrance, this rejection has a long time effect. A common situation in school is the rejection of the materials and instruction as a long-time goal. This situation is shown in Figure (2, below).

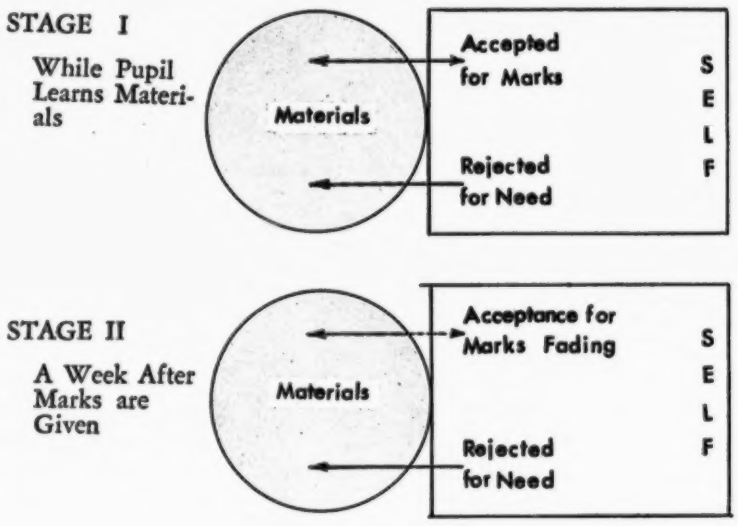

Figure . . . (2)—Schematic diagrams showing how youth may accept learning for immediate self-enhancement.

The organization of the curriculum in the typical high school acts as a deterrent to self-enhancement with some pupils. Set up to impart information and skills and to provide reasoning situations in various subject areas, the curriculum is by many pupils felt to be alien to their interest and removed from their environment; since the approach to the individual is made through the subject rather than through the self, the possibilities for growth provided for the individual are somewhat limited.

Moreover, all too frequently, the subjects are uncoordinated and fail to cover the environmental field in a comprehensive way.

Figure . . . (3, below)—from Snygg and Combs (19) . . . illustrates the lack of relationship of the curriculum both to the self and to the environment. The top diagram shows the individual's environmental field in its interaction with his total self; the second diagram depicts the environment, or external part of the phenomenal field, unrelated to the self; and the third illustrates the way in which the subjects fall in the external environment.

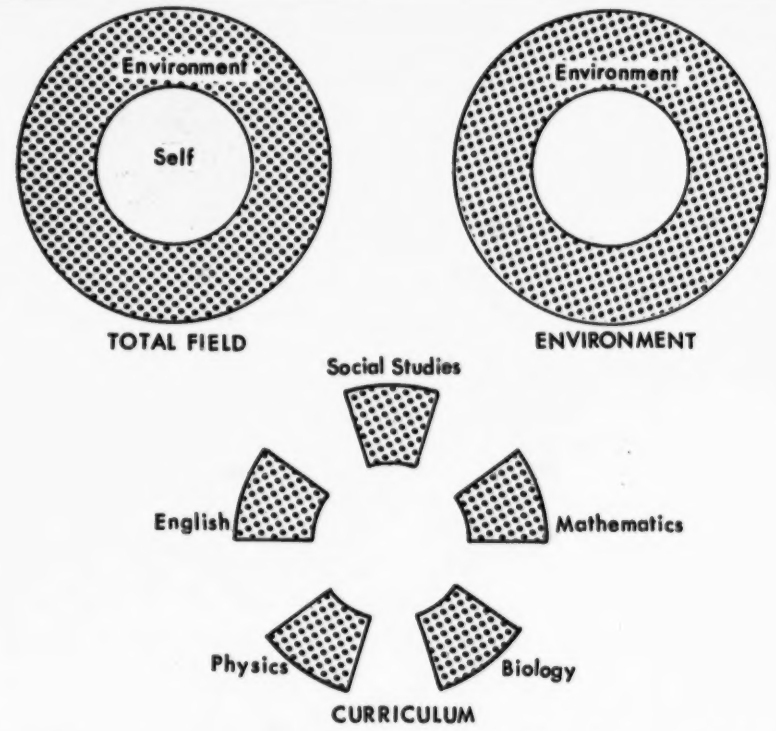

Figure . . . (3)—the environment, the self, and the curriculum (After Snygg and Combs) (19).

Some schools have attempted correlation of certain subjects as a method of overcoming the unrelatedness of subjects, and the extent that correlation unifies subject matter, it is an improvement. But to be really effective, the curriculum should grow out of the needs of the pupils and result in integration within each individual pupil. With a view to achieving this purpose other schools have developed the core curriculum, general educational program, or "common learnings," as it is sometimes called, which is an attempt to provide a program related to the total phenomenal field of the pupils. It uses a larger block of time than is needed to help pupils achieve the goals which they themselves recognize.

Well suited to the core program is the experience unit; but whether or not combined with the core, the experience unit holds promise. Its emphasis is upon the learner being actively engaged in the learning process; certainly under the experience unit he cannot be a passive recipient. This type of unit is characterized by freedom from subject matter prescription, as well as freedom to discuss and work upon whatever problems arise and are the concern of the group.

. . . . . .

Since self-enhancement occurs when an individual succeeds in achieving a goal which he regards as desirable—it is of the utmost importance that both the goals of learning and the procedures for arriving at the goals should be acceptable to a youth as his own, always with the stipulation that the goals are acceptable to society. Acts of performance which are without meaning to the self tend to keep these acts from being repeated. *Learning results most advantageously in an atmosphere in which youth feels free to explore the environment in relation to his own individual needs and feels adequate in the process.* To develop and administer an educational program meeting these specifications is not an easy task. Many mistakes will be made in attempting a program based upon this idea. To satisfy this concept of learning, changes in methodology and in the attitudes of teachers are necessary (pp. 43-47), (Italics are the research team's).

Thus, the research team would support the contention that the problem of student motivation hinges upon the student's perception of the immediate and essential utility of the subject matter. The core program appears to offer unique advantages in these terms, for:

> Teachers in the different subject areas find the core program permeates the entire school atmosphere. Children are *trained to cooperate* in planning with their teachers. They are *creative* in making projects which *put their knowledge to practical use.* Pupils are able to *evaluate* themselves and each other. They take an *active part* in every phase of the classroom and school-wide activity (3, p. 5) (Italics are the research team's).

In addition, it is the investigators' contention that such an approach to the education of these children will offer them a real opportunity to **integrate** the experience which they have in all phases of their education. Bruner (4) discusses the need for integration of educational experience as the students' need for **structure.** He notes that inherent in any discussion of the need for structure are four underlying general claims made for teaching fundamental structure of a subject. He identifies these as:

> The first is that understanding fundamentals makes a subject more comprehensible . . .
>
> The second point relates to human memory. Perhaps the most basic thing that can be said about human memory, after a century of intensive research, is that unless detail is placed into a structured pattern, it is rapidly forgotten . . .
>
> Third, an understanding of fundamental principles and ideas . . . appears to be the main road to adequate "transfer of training". . .
>
> The fourth claim for emphasis on structure and principles in teaching is that by constantly reexamining material taught in elementary and secondary schools for its fundamental character, one is able to narrow the gap between "advanced" and "elementary" knowledge. (p. 23 ff.).

If structure is as important as Bruner claims (and the research team agrees that it is), the role of the school in providing the student adequate opportunity to understand the structure of the material presented seems clear. The school has a major responsibility not only to teach but to teach in a meaningful manner. Other sources which give additional support to the statement of the potential value of the core program are those of Smith (20) and the report of the studies of the Curriculum Department of the New York City School (21).

One problem connected to these recommendations needs some recognition, however. The initiation of such classes would require some additional space and a wealth of additional materials in order to increase the possibility of successful educational experience for these pupils.

Several sources provide practical suggestions concerning the development of techniques, solution of administrative problems, and scheduling to make best use of time in a block or a core program (3) (20) (21) (26). The problems which are presented in a reorientation of the educational process seems insignificant, however, when they are compared to the potential of this technique in terms of better education for these students.

Recommendation 5: "...**that the instruction of pupils in all courses be done on several bases through the use of teaching teams wherever and whenever possible.**"

The research team's recommendation concerning teaching teams is made on the basis of several proposals which have been made in the literature (22) (23) (24). The investigators would support the use of teaching teams in this particular school on two main bases: (a) the techniques allow more effective utilization of special teacher skills with large groups of students, and (b) the use of large-group instruction would allow some preparation time for members of the team.

The research team would doubt that complete adoption of the techniques advocated for team teaching would be beneficial to the students at Lincoln Junior High School in light of their behaviors and the evident differences in their perception of education and the educational process. Rather, it is the considered opinion of the investigators that it will be necessary to adapt these techniques. Trump and Baynham (24) have made a comprehensive analysis of the possible utilizations and adaptations of the team teaching approach.

Recommendation 6: "...**that the subjects, other than the four mentioned in the block courses, be utilized primarily to supplement learnings gained in the block courses.**"

This approach to the instruction of the student has not been greatly utilized, at least insofar as the team is aware. The procedures which might be best utilized to foster these conditions are unknown. However, in light of the apparent needs of the students within this school, the recommendations would appear to follow logically. The students in this school have particular needs to integrate their learnings in a presently useful, meaningful manner. This approach would appear to assist the school to give structure to student learnings in a way which would have immediate pertinence to the students.

Recommendation 7: "...**that all students...be required to take physical education for one period per day...** (and)...**that the present physical education program be revised to include equal emphasis on both interscholastic competition and intramural activities.**"

This recommendation is made for three separate reasons. First, the research team and the committee that reviewed the recommendations were in agreement that interscholastic competition serves a useful purpose within any school program. At Lincoln Junior High School, the benefits which accrue to this program are particularly evident. The students who take part in such competition are motivated to achieve well within the school's academic program, the morale of the school is augmented by their participation in interscholastic activities, and the cultural contacts fostered by interscholastic competition appear to have considerable benefit.

Second, the benefits of intramural activities to the individual student are apparent. In this community, where a number of these children lack sufficient orientation to recreational possibilities, a program of intramural competition could have highly beneficial effects.

Third, in light of nutritional and health problems common to such communities, it would appear that a program of remedial physical education would not be an unrealistic aspiration. Certainly, a number of the students

now in school would benefit greatly from such an approach.

Recommendation 8: "...**that one period of the school day be set aside for a comprehensive homeroom-guidance period.**"

Since present schedules preclude extensive teacher-pupil contact except as a part of the academic program, the recommendation made could allow such contacts on a less formal, unstructured basis. The period would allow the children and the teacher to interact in a less constrained situation, and the possible guidance and learning which might accrue to this situation might be considerable.

Although it is more thoroughly discussed in the previous section, it would seem pertinent to point out that in this type of situation, the teacher is in an almost ideal situation to assist his pupils in the development of a realistic self-concept. Within the classroom, it is possible for the teacher to assist the pupils in the development of a realistic self-concept in certain directions—but in an unstructured situation, other, equally meaningful learnings may also be fostered.

Recommendation 9: "...**that each student in the second and third years be continually re-evaluated by both the student and the teacher.**"

Recommendation 10: "...**that each student in the third year be re-evaluated by his teachers and the counseling staff in order that he might be guided into one of three possible curricula for further education. These curricula would, in the main, correspond to the anticipated career patterns of the students.**"

The Problem of Evaluation of Student Potential

Grouping students in major curricular areas would appear to be necessary as the level of education becomes more specialized. Since the students in the block will be ungrouped, grouping when the pupils leave to go on to high school, where the subjects are more specialized, assumes more importance.

In this community, the problem appears to be compounded because a majority of the students are unlikely to graduate from high school. These students lack a goal, and even if they are aware of one, they often lack knowledge of means of its attainment. They are not challenged by the present curriculum. The procedures which the team proposes appear to allow students of differing potentials to work to their capacity without singling them out from their peers. All students participate in the same curriculum, but the participation differs in degree, and the end results will probably differ markedly.

The three curricula which the team recommends appear to be administratively convenient and socially acceptable to the students. It is anticipated that the curricula would be sufficiently flexible so as to allow the students to move from one to another without too much trouble, should the necessity for such a move become apparent.

Perhaps more important, however, is the reaction of the individual student to this approach. It would appear that the use of the problem method in conjunction with evaluation would encourage the student to develop keener powers of self-assessment. The investigators are of the opinion that although marks in various classes may be of some value in terms of motivation of partially acculturated students, they fail with students who are value oriented to present rather than future time. In a brief study initiated by the research team, it was determined that the students of this school were given about the same proportion of marks (A,B,C,D, and F) as students in another junior high school in a higher socio-economic level community within this city.

One of the basic principles developed in the proposal of the research team is the premise that the length of the period of general education and the period of specialized education depends upon the occupational level to which the student aspires. Education for education's sake would appear to be of questionable value for both the students and the teachers at this junior high school. It should also be noted that many of the students who leave school early are those who have the least potential for academic success.

The diagram, page 27, demonstrates graphically the team's estimation of the general relationship between the overall potential of the student and the length of education which may be necessary. It should be pointed out that the team separates general and specialized education.

The schools, generally, have not made much use of research findings or general principles developing from past studies in terms of the potential applicability of the preceding diagram. One possible example of this discrepancy would be the fact that many students with intellectual capacities below the Intelligence Quotient of ninety (90) lack the capacity to learn high level trade skills. However, many of the students in these school programs come from just this group. Students with average or higher ability are not usually directed toward vocational education. The school, reflecting the value orientations of the large community, instead encourages these students to plan to enter college.

The process of evaluation of individual potentialities in terms of future plans would appear to have some possible benefits for students from all cultural and class groups within the community, for the future temporal orientation combined with evaluation of individual potential in a **non-threatening** atmosphere would tend to allow the students to assume some of the values which the school promotes on a trial basis. With constant repetition, it would seem reasonable that behaviors characteristic of a more individualistic orientation would be encouraged and reinforced.

The Continued Education of the Potential Early School Leaver

The research team feels that it must be recognized that many of the children in this junior high school will be unlikely to complete a full educational program which would lead to graduation. For this reason, the research team has made a recommendation for the establishment of a community school which would be allied to (but not necessarily on the same campus as) the junior high school.

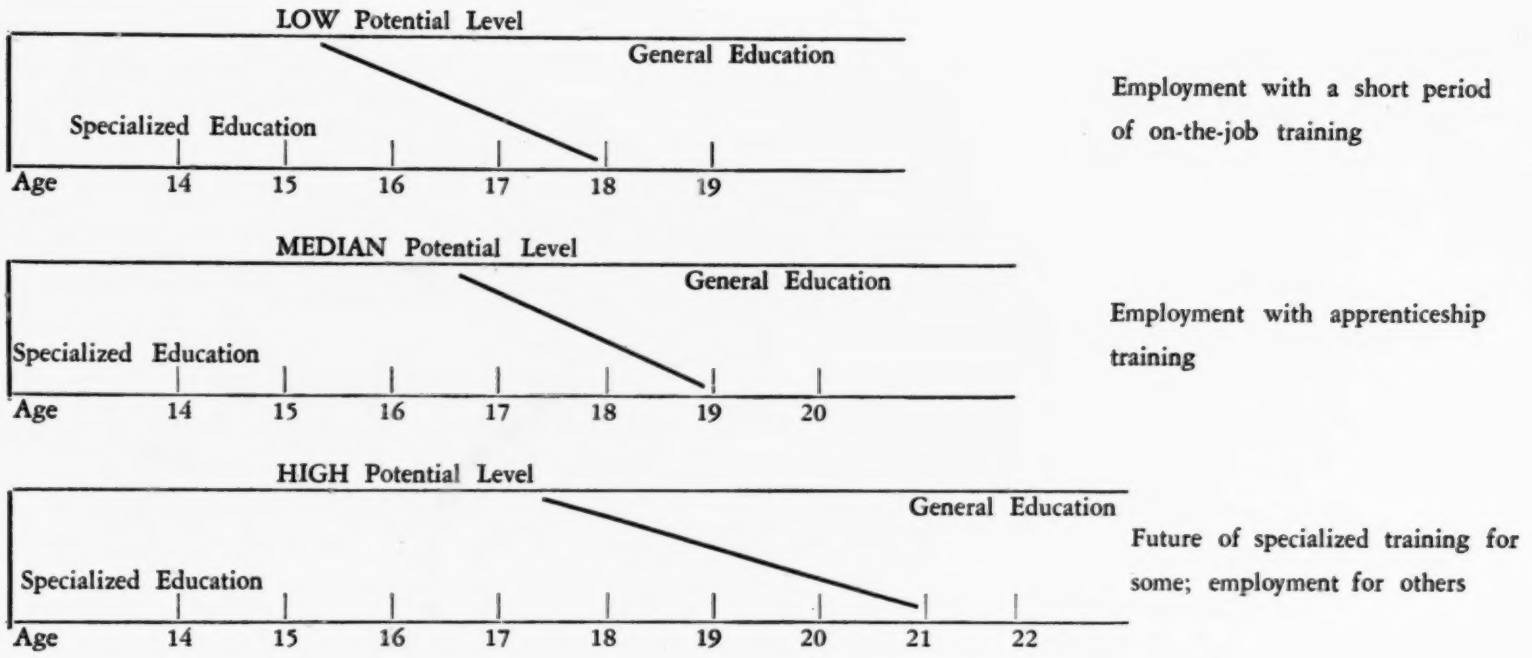
LOW Potential Level
General Education
Specialized Education
Age 14 15 16 17 18 19
Employment with a short period of on-the-job training
MEDIAN Potential Level
General Education
Specialized Education
Age 14 15 16 17 18 19 20
Employment with apprenticeship training
HIGH Potential Level
General Education
Specialized Education
Age 14 15 16 17 18 19 20 21 22
Future of specialized training for some; employment for others

Figure . . . (4) The relation of general and specialized secondary and higher education for a group of differing potentialities.

The addition of a specialized education program on a fourth and fifth year level at Lincoln Junior High School would appear to fill a definite and unmet community need. It is believed that this may motivate the potential early school leaver to continue his education for two more years. The program which would be initiated within this school would be such as to allow the individual student to see and appreciate the potential of the program in terms of his own immediate and future needs. In addition, this program would provide the student with a means of educational termination which is honorable.

The fact that a child's education may be terminated honorably may be more important than it seems at first glance, for it has been argued that one should go to school because additional education increases one's earning capacity. This is a fallacious argument. The U.S. Department of Commerce, Bureau of Census, in their 1960 report, has arranged considerable evidence to support this premise (25).

Years of Schooling Completed by Persons Fourteen Years of Age or More (Averages for Men and Women)

	Average Income
Less than eight years	$1308.00
Eight years, only	2062.00
One to three years of high school	2231.00
Four years of high school	3292.00
One to three years of college	3395.00
Four years of college	4639.00
Four or more years of college	5654.00

Upon analysis of these figures in relation to educational attainment, it may be seen that an increase in income accrues mainly to the attainment of: (a) a high school diploma, (b) a college degree at the A.B. level, or (c) one of the higher degrees at the college level.

The amount of increased income one may gain from attending high school for three years—as opposed to only one year—would be a net gain of $169—or $56 per additional year of further education. The same is true at the college level. Here one increases his income only an average of $34 per year unless he continues through college to the A.B. degree. In other words, the intrinsic value of education—**i.e.** the knowledge and habits obtained by education—appears to be only a slight factor in terms of one's inherent earning capacity.

Although it is felt that the figures cited demonstrate clearly that intrinsically additional years of education do not increase earning power, when these income figures are analyzed further, there seem to be several central factors which bear upon this problem. Many occupations, including a number of skilled and semi-skilled occupations, have established a blanket requirement of high school graduation for all individuals employed. This is often the only ability or aptitude requirement for employment in these fields. In other occupational fields, a college degree is a limiting requirement for employment.

The reasons for these requirements would seem simple. Often management wishes to insure continuance of not only high level performance in a given occupation, but they also wish to assure themselves of perhaps more than the basic intellectual capacity which is necessarily for the work. In this manner, management is assured that supervisory and administrative personnel, trained in the field, will be developed.

When an occupational area needs the full sweep of a high school education, it would appear that a high school diploma would be a reasonable requirement. However, it is the opinion of the research team that a number of vocational areas which use high school graduation as a preliminary requirement for employment do so inappropriately.

If a comparison of innate abilities were made between students who have completed one or two years of high school and high school graduates, it is doubtful that any significant differences could be found except possibly in the area of specific knowledge of subject matter. The research team would contend that there is little difference between these groups in terms of preparation for a specific occupation.

The solution to this dilemma would appear to lie in recognizing the fact that a majority of the occupational areas which students from the Lincoln Junior High School community will enter are occupations which in reality do not need the level of training found in high school graduates. High school graduation should be and is, to some extent, the way in which students enter the skilled occupations, whose college graduation and higher technical degrees help in certifying the individual's ability in technical and professional fields.

It would then appear logical that a certificate should be considered for schooling which prepares a student to enter the unskilled occupations and many of the sales and service occupations. This type of certificate might well be granted by the Lincoln Community School for a fourth and fifth year of specialized educational preparation.

The Proposed Curriculum

The curriculum of the community school would have to be determined by specialists in occupational and educational areas. The research team does not feel that empirically developed recommendations would be as valuable as actual community needs in terms of curriculum development. However, during a discussion of these recommendations by the committee appointed by the superintendent, a number of cautions were raised which would have some pertinence to this problem.

The committee noted that approximately 60 per cent of the children who presently attend Lincoln Junior High School may be eligible for this type of program. The members of the committee stated that they would hope that the program would include intensive concentration in the learning of saleable work skills, personality and citizenship training and some of the practical skills which are common to an American citizen—e.g. preparing a budget, income tax preparation, and managing a bank account. Of course, the central focus of the educational program would be the preparation of the student for one of many semi-skilled and unskilled occupations in the community which do not require high school graduation for entrance.

It was also suggested that the schools investigate the possibility of using students with similar potentials for on-the-job training throughout the school system in such positions as helpers in the cafeterias, warehouse clerks, and janitorial assistants. The primary consideration of the program would be the training involved, but if there were some possibility of pay for this work, student motivation would undoubtedly be increased.

The Problems of Staffing

The investigators feel that it must be recognized that the problem of staffing a program of the type recommended are extensive. The recommended changes in methods would certainly require the employment of above average professional staff members.

However, another problem becomes evident when the problems of staffing are discussed. In what manner can the school administration specify the necessary qualities of an effective teacher under the proposed curriculum? In an attempt to delimit one area of selective criteria, the team has investigated the area of teacher effectiveness as a criterion of education, and it was pointed out that the problem of specification of particular talents, attitudes, perceptions of children and abilities is still a demanding one.

Therefore, the team would suggest that, in light of the fact that such specifications are of doubtful predictive validity, perhaps other areas of possible interest in staff selections might be investigated. The research team feels that objective instruments, such as the **Minnesota Teacher Attitude Inventory** might be investigated for their potential for assistance in terms of staffing problems.

Since the recommended program places heavy demands upon teacher, time and preparation, it would appear necessary that certain changes in the administrative organization of the school may be necessary. It would appear highly likely that the whole teaching staff would benefit from a minimum of one free period per day for special preparation, individual conferences, and group planning. Such a move would, of course, increase staff size and make additional office and/or classroom space essential.

In addition, the research team, after discussion with the committee reviewing the recommendations, would feel that there may be considerable need for additional planning time previous to the beginning of each school year. For this reason, if it were possible to remedy the professional staff of this school on a ten-month basis, the benefits to teacher morale and effectiveness would appear obvious.

The Problem of Present Teacher Effectiveness

It is likely that a number of teachers presently teaching at Lincoln Junior High School would be unable or unwilling to work effectively within the confines of the recommended program, and it also appears likely that a number of teachers who will be brought into the program will not be able to work at maximum efficiency within this program. For this reason, the team has recommended that appropriate means of requesting and granting transfers to more traditionally oriented schools be initiated. Generally, the research team and the administration of the school would agree that such transfers should be based upon teacher perception of his potential in terms of the recommended program.

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CHAPTER IV

Recommendations for Further Research

The Lincoln Guidance Research Project has resulted in the development of a series of recommendations in the areas of curriculum and guidance. It is the considered opinion of the research team that further research in this area might be oriented in two major directions.

The Study of Guidance

In the case of the guidance program, one element defied the intensive study which was initiated. The research team was unable to define promising areas in the development of counseling methods which would be most useful with the problem areas which are common to this community. This is foreshadowed in Section I, where a single analysis of the theory differentiates the behavior problems of youth in low socio-economic level neighborhoods with that of the behavior problems among youth of middle-class neighborhoods.

Although it is felt that the guidance and curricular procedures recommended will be material in the alleviation of some of the problems common to communities of this type, it is necessary, at the same time, to recognize that even a major attempt by only one social agency in the community will not result in the total eradication of such behaviors.

At present, the nature of the psychological complex involved with these behaviors is not clear. Most counseling specialists feel that the environment as an element in the situation does not change the essential nature of the conflict—which is seen as one within the individual. This fairly well accepted theory is illustrated best by the paradigms presented by Bucklew.* The paradigms reflect the theory in a highly refined form.

Most of the paradigms do not show or admit an environmental factor in the conflict to be resolved. Where the environmental condition does admittedly bear on the case, it is still outside of the area of conflict enveloped by the individual. One of the simple paradigms which does not show an environmental factor appears above.

Bucklew, in explaining how this type of behavior involves the environment (social confrontation with immorality of his theft) states: "It is a 'delinquent' ego structure. The boys in their group, due to their atrocious backgrounds, had built up enormous quantities of hostile and aggressive hysteria, ready to be released on their environment at the slightest stimulus."**

Although the difference between this type of case and the more normal neuroses is recognized in therapy, the theory involved still presumes that the conflict between the ego and the alter-ego—i.e. it has to do with his self-concept. A possibly different theory can be postulated—one which makes the environment a direct part of the behavioral difficulty. The paradigm might, for example, be drawn as in Figure II:

*John Bucklew. *Paradigms for Psychopathology.* (New York: J. B. Lippencott Company, 1960).

**_Ibid._ page 139.

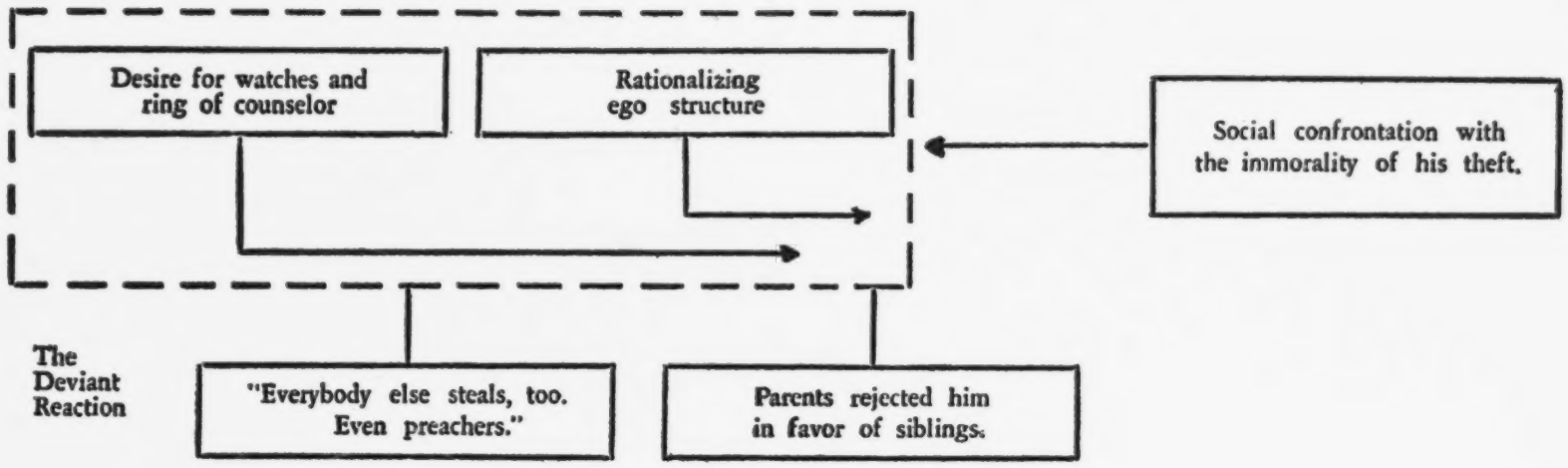
Desire for watches and ring of counselor
Rationalizing ego structure
Social confrontation with the immorality of his theft.
The Deviant Reaction
"Everybody else steals, too. Even preachers."
Parents rejected him in favor of siblings.
(Rationalizations)

Figure I. Deviant Behavior in a Young Boy

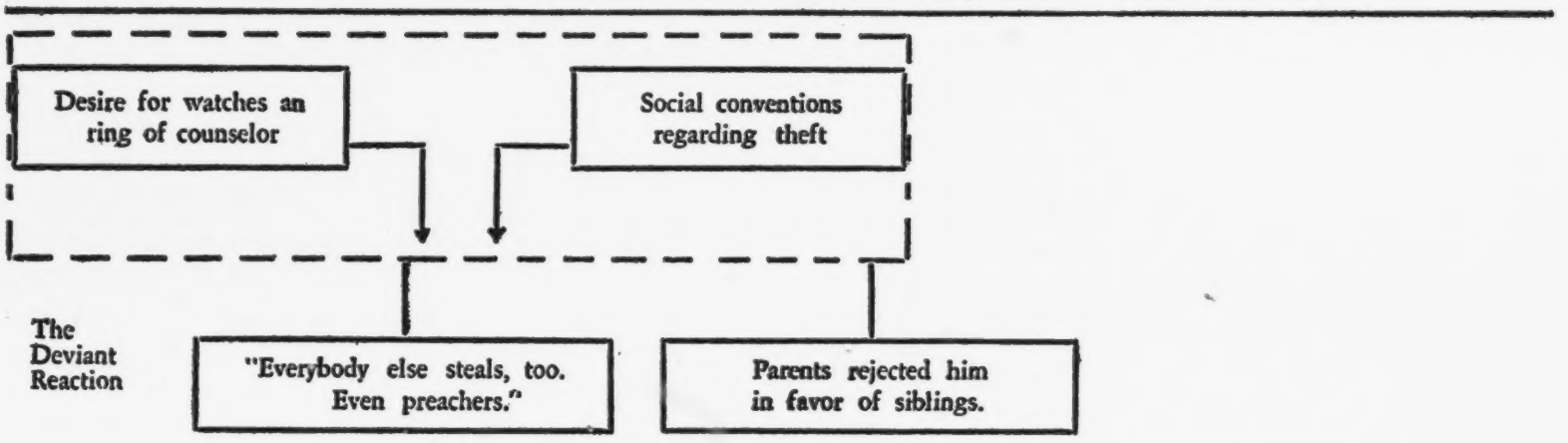
Desire for watches an ring of counselor
Social conventions regarding theft
The Deviant Reaction
"Everybody else steals, too. Even preachers."
Parents rejected him in favor of siblings.
(Rationalizations)

Figure II. Possible variation in theory for "Deviant Behavior in a Young Boy." Shown in Fig. I

In this paradigm, the environment—**i.e.** the social convention against theft—is put directly in as a part of the conflict. What then follows is that the environment may be manipulated in such a manner that the student will accept a new situation of "not stealing." The acceptance of understanding of the social conventions does not involve any conflict between the ego and the alter-ego. It is theorized that behavior of the type found in low-socio-economic level neighborhoods probably cannot be alleviated through the normal methods utilized in psychotherapy. Assuming our analysis of the situation is correct, it would appear that the procedures for counseling this type of pupil should be re-oriented. A new frame of reference for research must be developed to discover these procedures.

Continuing Evaluation of Educational Practices

The second direction for further research involves the implementation of the school program which has been recommended in Chapters I and II of this report. The implementation of this program will involve counselor and teacher training, provision for materials, new equipment, changes in classroom space, etc. The recommendations for guidance and the curriculum form a logical framework based on research and analysis, and in this sense might not require any further scientific justification. However, in education, advances are never final—partly because new conditions in society require changes in school objectives and thus in school practices. For this reason, the practices recommended should not be considered a permanent solution to the problem considered. This program should be carefully evaluated to discover if it does, indeed, decrease maladjustment and positively affect achievement. This step is recommended not only because of its scientific logic but also because this changed program, carried on in a public school setting, will need justification from the viewpoint of public information.

The evaluation program should be made at proper intervals of time with the use of control groups. Such evaluation may be approached from several directions, as for example: (a) from the observation of teacher participation in the program, (b) from measures of adjustment and self-concept, (c) from statistics of delinquency rates

in this community, (d) from conventional achievement measures, and (e) from expressed attitudes towards school and various motivational factors, such as those used by Coleman.* The last four types of evaluation would definitely need control groups. Upon the basis of the evaluation, it should be possible to develop new hypotheses and then test such hypotheses through further research, either through an anlysis of variance of the data gathered in the evaluation or through a more intensive measurement and analysis of the clues obtained.

The particular course in research for school programs here recommended would be best illustrated in the following paradigm:

...R — P — E — H — R — P — E...

where R represents analytical research, P represents the school practice resulting from the research, E represents the evaluation of the school practice and H the new or more detailed hypotheses evolving from the evaluation.

*James E. Coleman. *The Adolescent Society.* (New York: The Free Press of Glencoe, 1961).

Appendix

Mean Placement on Tests Used in Sample

Table A—Intellectual Ability: (Normal Mean IQ - 100)
90 IQ
14 years, five months is Chronological age (C.A.)
13 years, no months is Mental Age (M.A.)

Table B—California Achievement Test
(Grade Placement at time of Test - 8.1)

1. Reading Grade Placement	7.2
2. Arithmetic Grade Placement	6.6
3. Language Grade Placement	6.8
4. Total Grade Placement	6.8

*Table C—Iowa Tests of Educational Development.**

1. Social Studies Background	45.3
2. Natural Science Background	44.7
3. Correctness of Expression	46.4
4. Quantitative Thinking	45.9
5. Reading Social Studies	46.4
6. Reading Natural Science	49.7
7. Reading Literature	49.1
8. General Vocabulary	44.1
9. Composite Score	46.6

*Table D—Multiple Aptitude Test**

1. Factor I Verbal	36
2. Factor II Perceptual Speed	36
3. Factor III Numerical Reasoning	38
4. Factor IV Spatial Visualization	42

*Table E—California Personality Inventory**

1. Dominance	47
2. Capacity for Status	32
3. Sociability	41
4. Responsibility	34
5. Achievement via Conformance	33
6. Achievement via Independence	35

*Reported in Standard Scores

Correlation Coefficients Between Test Scores and Factors Used in Research

TABLE I
CORRELATION COEFFICIENTS OF THE MULTIPLE APTITUDE TESTS WITH OTHER TEST SCORES AND RATINGS

Iowa Test of Educational Development	I	II	III	IV
	Mutiple Aptitude Test Factors			
	Verbal	Perceptual	Numerical	Spatial
Social Studies	.69**	.51**	.51**	.36**
Natural Science	.65**	.45**	.42**	.55**
Correctness of Expression	.66**	.62**	.83**	.43**
Quantitative	.36**	.32**	.47**	.24*
Reading, Social Studies	.76**	.59**	.44**	.25**
Reading, Natural Science	.35**	.34**	.51**	.13
Reading, Literature	.74**	.69**	.58**	.45**
General Vocabulary	.72**	.47**	.38**	.34**
Composite Score	.85**	.69**	.68**	.49**
Lorge-Thorndike				
Verbal	.80**	.66**	.57**	.48**
Non Verbal	.69**	.62**	.69**	.64**
Total	.81**	.69**	.67**	.60**
California Personality Inventory				
Sociability	.36**	.17	.28**	.25**
Responsibility	.51**	.43**	.33**	.25**
(Relationships with other CPI factors are not significant)				
Home Factors				
Scale 2—				
Achievement Desired	.36**	.25**	.26**	.16
Scale 6—				
Restrictions Inside Home	.25**	.28**	.28**	—.08
(Relations with other factors not significant except in two isolated correlations)				

* Significant at the 5% level of confidence.
**Significant at the 1% level of confindence.

TABLE II. CORRELATION COEFFICIENTS OF THE IOWA TEST OF EDUCATIONAL DEVELOPMENT WITH OTHER TEST SCORES AND RATINGS

CPI TRAITS	Soc. St. Backg'd	Nat. Sc. Backg'd	Corr. of Expres'n	Quantit. Thinking	Soc. St. Reading	Nat. Sc. Reading	Lit. Reading	Gen'l. Vocab.	Compos.
Sociability	.20	.36**	.23*	.25*	.19	.36**	.15	.37**	.38**
Responsibility	.24*	.39**	.42**	.26*	.31**	.19	.34**	.44**	.45**
Achievement via Conformance	.06	.21	.20	.10	.01	.22	.04	.13	.15
Achievement via Independence	.14	.17	.18	.24*	.22	.14	.32**	.16	.24*
(Relationship with other CPI Traits was not significant)									
Lorge-Thorndike Intelligence Tests									
Verbal	.61**	.66**	.71**	.28*	.64**	.35**	.73**	.66**	.82**
Non Verbal	.43**	.50**	.64**	.34**	.59**	.37**	.65**	.58**	.74**
Total	.57**	.63**	.70**	.34**	.66**	.39**	.74**	.68**	.84**
Home Factors									
Scale 2: Achievement Desired	.07	.26**	.28**	—.01	.30**	.06	.16	.20	.24*
Scale 6: Restrictions in Home	.15	.05	.23*	—.02	.31**	.22	.18	.21	.23*
(Relationship with other Home Factors was not significant with two exceptions noted later)									

*Significant at the 5% level of confidence.
**Significant at the 1% level of confidence.

TABLE III

CORRELATION COEFFICIENTS OF THE LORGE-THORNDIKE INTELLIGENCE TESTS WITH OTHER TEST SCORES AND RATINGS

Selected Scales from the *California Personality Inventory*	*Lorge-Thorndike Intelligence Tests* Verbal IQ	Non-Ver. IQ	Tot.
Sociability	.39**	.36**	.42**
Responsibility	.44**	.36**	.42**
Achievement via Conformity	.14	.19	.18
Achievement via Independence	.20	.18	.22*
(Other scales correlation n.s.)			

Selected Ratings of Home Factors	*Lorge-Thorndike Intelligence Tests* Verbal IQ	Non-Ver. IQ	Tot.
Scale 2: Achievement Desired of Student by home	.28**	.28**	.28**
Scale 5: Restrictions on Child Outside of Home	.22*	.18	.19
Scale 6: Restrictions on Child Within the Home	.22*	.25**	.23*
(Correlations with other ratings were not significant)			

For other intercorrelations between the Lorge-Thorndike Intelligence Test and other Tests, see the following:

1. *Multiple Aptitude Test*—See Table I
2. *Iowa Tests of Educational Development*—See Table II

*Significant at the 5% level of confidence.
**Significant at the 1% level of confidence.

TABLE IV

CORRELATION COEFFICIENTS BETWEEN THE CALIFORNIA PERSONALITY INVENTORY AND OTHER TEST SCORES AND RATINGS

Home Factors

The only relationships of significance are those between the CPI Scale of "Responsibility" and Scale 2: Achievement Desired of the Student by the Home (.26*), and with Scale II: Permissiveness for Aggression Against Other Adults (.33**).

Other Tests

For the intercorrelations between the *California Personality Inventory* and other tests, see the following:

1. *Multiple Aptitude Tests*—See Table I
2. *Iowa Tests of Educational Development*—See Table
3. *Lorge-Thorndike Intelligence Tests*—See Table III

*Significant at the 5% level of confidence.
**Significant at the 1% level of confidence.

TABLE V
BISERIAL CORRELATION COEFFICIENTS BETWEEN BILINGUALISM AND OTHER TEST SCORES AND FACTORS

Iowa Test of Educational Development	r_{bis}
Test 1: Social Studies Background	.14
Test 2: Natural Science Background	.13
Test 3: Correctness of Expression	.76**
Test 4: Quantitative Thinking	.21
Test 5: Reading, Social Studies	.17
Test 6: Reading, Natural Science	−.14
Test 7: Reading, Literature	.00
Test 8: General Vocabulary	.20
Test 9: Composite Score	.12

California Personality Inventory	r_{bis}
Dominance	−.08
Capacity for Status	−.15
Sociability	.07
Responsibility	.10
Achievement via Conformance	.05
Achievement via Independence	−.04

Multiple Aptitude Tests	r_{bis}
Factor I: Verbal Aptitude	.29**
Factor II: Perceptual Aptitude	.02
Factor III: Numerical Aptitude	.23*
Factor IV: Spatial Aptitude	.01

Lorge-Thorndike Intelligence Tests	r_{bis}
Verbal Intelligence Quotient	.27**
Non-Verbal Intelligence Quotient	.06

*Significant at the 5% level of confidence.
**Significant at the 1% level of confidence.

Factors Used in Home Visitation	r_{bis}
Scale 2: Achievement Desired of Student by Home	.46**
Scale 3: Pressure of Home for School Achievement	.35**
Scale 5: Restrictions on Child Outside of Home	.02
Scale 6: Restrictions on Child Within the Home	.04
Scale 7: Parental Demands for Obedience	−.31**
Scale 8: Parental Consistency of Demands	−.17
Scale 9: Parental Permissiveness for Aggression Against Sibs	−.02
Scale 10: Parental Punitiveness for Aggression Against Sibs	.17
Scale 11: Parental Permissiveness for Aggression Against Adults	−.35**
Scale 12: Parental Punitiveness for Aggression Against Adults	−.01

*Significant beyond the 5% level of confidence.
**Significant beyond the 1% level of confidence.

TABLE VI
BISERIAL CORRELATION COEFFICIENTS BETWEEN TEACHER RATING OF STUDENT BEHAVIOR AND OTHER TESTS AND FACTORS

Iowa Tests of Educational Development	r_{bis}
Test 1: Social Studies Background	−.47**
Test 2: Natural Science Background	−.29**
Test 3: Correctness of Expression	−.36**
Test 4: Quantitative Thinking	−.25*
Test 5: Reading, Social Studies	−.40**
Test 6: Reading, Natural Science	−.13
Test 7: Reading Literature	−.55**
Test 8: General Vocabulary	−.34**
____: Composite Score	−.44**

California Personality Inventory	r_{bis}
Dominance	−.08
Capacity for Status	.08
Sociability	−.18
Responsibility	−.32**
Achievement via Conformance	−.17
Achievement via Independence	−.12

Multiple Aptitude Test	r_{bis}
Factor I: Verbal Aptitude	−.53**
Factor II: Perceptual Aptitude	−.38**
Factor III: Numerical Aptitude	−.47**
Factor IV: Spatial Aptitude	−.33**

*Significant beyond the 5% level of confidence.
**Significant beyond the 1% level of confidence.

Factors Used in Home Visitation	r_{bis}
Scale 2: Achievement Desired of Student by Home	−.33**
Scale 3: Pressure of Home for School Achievement	−.19
Scale 5: Restrictions on Child Outside of Home	−.07
Scale 6: Restrictions on Child Within the Home	−.12
Scale 7: Parental Demands for Obedience	−.22
Scale 8: Parental Consistency of Demands	.06
Scale 9: Parental Permissiveness for Aggression Against Sibs	−.29**
Scale 10: Parental Punitiveness for Aggression Against Sibs	−.06
Scale 11: Parental Permissiveness for Aggression Against Adults	−.15
Scale 12: Parental Punitiveness for Aggression Against Adults	−.09

*Significant beyond the 5% level of Confidence.
**Significant beyond the 1% level of Confidence.

TABLE VII
INTERCORRELATIONS OF SELECTED TESTS AND FACTORS

A. Intercorrelations of the *Multiple Aptitude Test* Factors

	I	II	III	IV
Factor I: Verbal Aptitude		.69	.61	.50
Factor II: Perceptual Aptitude			.64	.52
Factor III: Numerical Aptitude				.55
Factor IV: Spatial Aptitude				

B. Intercorrelations of the sub-tests of the *Iowa Test of Educational Development*

	1	2	3	4	5	6	7	8
1. Social Studies Background		.55	.49	.44	.53	.28	.64	.59
2. Natural Science Background			.42	.28	.42	.20	.50	.60
3. Correctness of Expression				.30	.59	.31	.61	.51
4. Quantitative Thinking					.24	.52	.27	.38
5. Reading: Social Studies						.27	.76	.57
6. Reading: Natural Science							.21	.37
7. Reading: Literature								.53
8. General Vocabulary								

Letter to Parents, Home Visitation Questionnaire, and Check Sheet

Albuquerque, New Mexico
Dear

We are trying to learn a number of things about the students who go to Lincoln Junior High School. We are doing this to help find different areas in the school program (such as classes, etc.) which might be changed to help more students to be successful in school. Because our staff is small, we can't talk to all of the students in Lincoln, so we have chosen a small number of students who we feel are like most of the students here.

We would like to get some information about how these students get along at home, for this seems to be closely connected to their school progress. If it is possible, we would like to talk to you about _____. An interviewer will be in your area on _____ in the _____.

We assure you that the information which is gathered *will be kept strictly secret.* Only the members of the interview team (David Segel, John Baca, Adolfo Velasquez, Ben Esparza, and Ron Ruble) will see or make use of it.

We would appreciate your help very much. If the time we have set is not convenient, please telephone us at CHapel 7-2859 between 9:00 a.m. and 4:30 p.m., and we will try to change this for you. Thank you very much for your cooperation.

Sincerely,
Charles R. Spain, Superintendent
Robert Evans, Principal

HOME VISITATION QUESTIONNAIRE

1. What school or schools has _____ attended in the last five years?
   a. How have you felt about _____'s progress in school during this period of time? What have you said to him/her?
   b. Considering _____'s ability, are you satisifed with how he/she is doing in his/her school work?
   c. Have you expressed this feeling to him/her?
   d. How far would you like _____ to go with his/her schooling?
   e. What kind of job would you like him/her to get?
   f. Does _____ know what you expect of him/her?
2. What kind of work does _____'s father (step-father, etc.) do? Is he employed at present? Do you work? What kind of work do you do? Are you working at present?
3. We'd like to get some idea of the sort of things that _____ is allowed to do and the sort of things that he/she isn't allowed to do. What are some of the rules you have for him/her?
   a. How about going out at night?
   b. Does he/she have to check out or be in at a certain time?
   c. Do you expect _____ to let you know what he/she has been doing?
   d. Are there things you forbid _____ from doing when he/she is out with his/her friends? Places you forbid him/her from going?
   e. Are there any of _____'s friends with whom you have discouraged him/her from associating?
   f. (IF OLD ENOUGH) Is _____ allowed to use the family car?
   g. How about smoking and drinking? How do you feel about these?
   h. How about using bad language (swearing)
   i. Can _____ use the radio and TV as freely as he/she likes?
   j. Are there times when _____ has to do his/her homework?
   k. Are there times when he/she has to keep from being noisy around the house?
4. Some mothers/fathers expect their children to obey immediately when they tell their child to do something. Others don't think that it's terribly important for a child to obey right away. How do you feel about this?
5. If _____ doesn't do what you ask, do you ever drop the subject, or do you always see that he/she does it?
6. (IF NOT AN ONLY CHILD) How well would you say that _____ gets along with his/her brother (s) and/or sister (s)?
   a. How do you handle things when they quarrel?
   b. Suppose _____ strikes his/her borther/sister, what do you do?
   c. How do you deal with it if _____ is unpleasant to them in other ways? What do you say to him/her?
   d. How do their troubles usually start?
   e. Who do you think is usually to blame?
7. Has _____ ever complained that a teacher or another adult was being unfair to him/her?
   a. (IF YES) What did you do? Say?
      (IF NO) Suppose this happened, what would you do? Say?
   b. Have you ever encouraged him/her to stand up for himself/herself against another adult?
   c. What would you do if you discovered that _____ was giving a teacher a hard time? What would you say?

HOME VISITATION QUESTIONNAIRE
(Spanish Translation)

1. Cuales escuelas ha attendido _____ durante los ultimos cinco anos?
   a. Como ha progresado _____ en la escuela durante estos cinco anos?
   b. Considerando la abilidad de _____ esta Ud. satisfecho con el progreso que ha hecho el en la escuela?
   c. Que ha espresado Ud. a el como se siente Ud?
   d. Cuanto quiere Ud. que avance el en sus estudios?
   e. Que clase de trabajo quisiera Ud. que el hiciera?
   f. Sabe _____ lo que Ud. espera de el?
2. En que trabaja el padre (o padrastro, etc.) de _____? Esta trabajando el ahora? Trabaja Ud? En que trabaja Ud? Esta trabajando Ud. ahora?
3. Nos puede decir lo que permiten a _____ que haga y cosas que no permiten que haga? Nos puede dar unas cuantas reglas que le han puesto a el?
   a. Como se siente Ud. de que el salga de noche?
   b. Le pide permiso de Ud. y tiene que estar en casa a tal hora?
   c. Espera Ud. que el le diga lo que ha hecho?
   d. Que hay cosas que le prohibe que haga cuando esta en compania de sus amigos?
   e. Tiene amigos _____ con quienes Ud. quisiera que no se juntara?
   f. (IF OLD ENOUGH) Le dejan usar el carro?
   g. Como se sienten Uds. sobre la cuestion de fumar y tomar?
   h. Como se sienten tocante el uso de malas palabras?
   i. Permiten Uds. que tenga el uso del television o el radio como el quiere?
   j. Tiene tiempo fijo el para hacer sus estudios en casa?
   k. A veces, lo tienen que callar?

4. Hay madres y padres que esperan que sus hijos les obedescan immediatamente cuando les hablan. Otros padres no creen que es de gran importancia que los hijos les obedescan immediatamente cuando los padres hablan. Que es su opinion sobre esta problema? Me puede decir como se siente su esposo (esposa) sobre esta cuestion?
5. Si _____ no hace lo que Ud. quiere, cual de estas cosas hace Ud? Lo olvida o lo hace que haga que Ud. manda?
6. (IF NOT AN ONLY CHILD) A su paracer, como la lleva con su(s) hermano (s) y/o hermana (s)?
   a. Que hace Ud. cuando estan peleando?
   b. Cuando el le pega a su hermano (hermana) que hace Ud?
   c. Si _____ no la lleva con sus hermanos, que le dice Ud? Que hace Ud?
   d. Cual es la razon porque no la llevan bien?
   e. Quien tiene la culpa cuando no la llevan bien?
7. En algun tiempo le ha dicho _____ que un maestro, una maestra, o otra persona no la lleva bien con el?
   a. (IF YES) En este caso que hizo Ud? Que le dijo Ud?
   (IF NO) En caso que esta pasara, que haria o diria Ud?
   b. En algun tiempo le ha dicho Ud. que se oponga contra un adulto?
   c. Que accion tomara Ud. si le diria que se porta mal con un maestro?

HOME VISITATION QUESTIONNAIRE CHECK SHEET

Scale 2. Level of school achievement desired of student by parents (Q. 1).
- _____a. Unimportant
- _____b. Expects high school graduation
- _____c. Expects student to go to college (no specification).
- _____d. Expects student to go to college with selective entrance requirements and/or graduate school (include teaching here)
- _____e. Expects student to go to college with selective entrance requirements and graduate school (include school teaching here if a prestige school).

Scale 3. Pressure placed upon student for school achievement (Q. 1).
- _____a. No pressure placed upon student under any conditions.
- _____b. No pressure because of satisfactory work. Would apply as grades drop.
- _____c. Mild pressure for student to work up to expectations.
- _____d. Moderate pressure for work up to expectation level.
- _____e. Strong or constant pressure. Demands that the child do better than necessary to meet ultimate expectations.

Scale 5. Restrictions placed upon child outside of home (Q. 3 a-f)
- _____a. No restrictions whatsoever.
- _____b. Few restrictions. Must let parent know if usually late, etc.
- _____c. Moderate restrictions. Limit on staying out late, though it varies.
- _____d. Expect to know where the child is and with whom. Some restrictions on choice of friends and activities.
- _____e. Strict rules, rigidly enforced.

Scale 6. Restrictions placed upon student inside of home (Q. 3 g-k).
- _____a. No restrictions unless behavior interferes with others.
- _____b. Few restrictions. Limited in minor ways only.
- _____c. Moderate restrictions. Limits set, but there is some latitude.
- _____d. Strict rules in some areas. Limitations in other areas with slight latitude allowed.
- _____e. Strict rules, rigidly enforced.

Scale 7. Parental demands for obedience (Q. 4).
- _____a. Does not expect obedience. States that this cannot be expected of a child this age.
- _____b. Expects some obedience, but will speak several times. Immediate obedience not expected. Noncompliance tolerated.
- _____c. Will tolerate delay under certain circumstances. Not others.
- _____d. Obedience expected. Delay tolerated. Compliance enforced.
- _____e. Instant obedience expected. Noncompliance not tolerated.

Scale 8. Parental consistency of demands (Q. 5).
- _____a. Very often drops subject.
- _____b. Sometimes follows through, but more often drops subject,
- _____c. Sometimes drops subject, but more often carries through.
- d. Usually carries through. Occasionally drops subject.
- _____e. Practically always carries through. Often makes strong effort.

Scale 9. Parental permissiveness for aggression toward siblings (Q. 6).
- _____a. Not at all permissive. All conflicts stopped by parents.
- _____b. Usually interferes. May ignore mild disputes.
- _____c. Interferes if someone gets hurt or very upset.
- _____d. Would restrain only in an emergency.
- _____e. Never interferes. Fighting natural. Let them fight it out.

Scale 10. Parental punitiveness for aggression toward siblings (Q. 6).
- _____a. Has never punished and would not do so.
- _____b. Has not punished because of no incidents. Would if aggression shown.
- _____c. Mild punishment for aggression (scoldings, reprimands).
- _____d. Moderate punishment. Possible deprivations of privileges and threats of more severe punishment.
- _____e. Severe punishment which may include physical punishment. Parents may get emotionally involved.

Scale 11. Permissiveness for aggression toward other adults (Q. 7).
- _____a. Not at all permissive. Child must respect elders.
- _____b. Generally not permissive. Would discourage direct aggression, but verbal expression is tolerated.
- _____c. Somewhat permissive. Would not interfere unless child was disruptive, insolent or fragrantly defiant.
- _____d. Would interfere as a last resort.
- _____e. Would never interfere. Not my business.

Scale 12. Punitiveness for aggression toward other adults (Q. 7).
- _____a. Has never been punished and would not do so.
- _____b. Has not punished because no incident. Would if it occurs.
- _____c. Mild punishment for aggression (scolding, reprimands).
- _____d. Moderate punishment. Deprivation of privileges and threats of more severe punishment.
- _____e. Severe punishment. including physical. Parent may get emotionally involved.

BEHAVIOR RATING FORMS
(Aggressive Behavior)

SYMPTOMS:

1. Often does not accept the decision of the teacher or class without showing resentment.
2. Is quarrelsome, fights often, gets mad easily.
3. Is a bully, picks on others.
4. Is resentful, defiant, rude or apt to talk back to adults
5. Disrupts class and is hard to manage.
6. Is regarded by other children as a pest.
7. Sometimes steals.
8. Lies frequently.

List from four to eight pupils* who exhibit the most aggressive behavior in each of your classes as defined by the eight symptoms given above. Write after each name your estimate of the total number of symptoms displayed by each youngster.

Aggressive Pupils (*4 to 8 per class*)

1st Period Class: Grade _____**

Name	No. of Symptoms
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

2nd Period Class: Grade _____**

Name	No. of Symptoms
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

*Note: If you have less than 18 pupils in class, the choices may be cut in half (*i.e.* four instead of eight).

**Grade should be marked: 7, 8, 9, or M (mixed).

BEHAVIOR RATING FORMS
(Withdrawn Behavior)

SYMPTOMS:

1. Is not noticed by other pupils; tends to be left out of pupil activities.
2. Is shy and/or timid.
3. Is fearful, anxious or excessively tense.
4. Seems to daydream a great deal.
5. Never stands up for himself or his ideas.
6. Finds it difficult to be in group activities.
7. Feelings are easily hurt; is easily discouraged.
8. Dislikes to answer questions in class even though he knows the answers.

List the two to four pupils* who exhibit the most withdrawn behaviors in each of your classes as defined by the eight symptoms listed above. Write after each name your estimate of the total number of symptoms displayed by each youngster.

Withdrawn Pupils (*2 to 4 per class*)

1st Period class: Grade _____**

Name	No. of Symptoms
1.	
2.	
3.	
4.	

2nd Period Class: Grade _____**

Name	No. of Symptoms
1.	
2.	
3.	
4.	

*Note: If you have less than 18 pupils in a class, the choices may be cut in half (*i.e.* two instead of four).

**Grades should be marked: 7, 8, 9, or M (mixed)

Note: The actual recording forms which the teachers received had full space to list all six daily classes. We did not feel that the unnecessary repetition of spaces to list class members added any information to that already presented.